

RIPSPEED
Mobile Entertainment

DV-725



OWNER'S MANUAL

1. Safety Precautions			
Warning	1	TA Function	29
Precaution	2	Cancelling Traffic Announcements	29
2. Main Features	3	AF(Alternative Frequency/Auto Following)	30
3. Before User		Region	30
Front Panel & Monitor	4	CT (Clock Time)	30
LCD Display	6	RT(Radio Time)	30
Remote Control For Front Zone	7	PI Search	30
Remote Control for Rear Zone	9		
4. Monitor Operation			
Open / Close TFT Monitor	11	9. DVD Player	
TFT Monitor Auto Open	11	Info Display on LCD	31
When Reverse Driving	11	Insert Disc	31
Monitor Tilt Angle Adjustment	12	Disc Ejection	31
Aspect Ratio	12	Pause Playback	32
Image Setting	12	Stop Playback	32
When Parking Brake Engaged	13	Fast Forward / Fast Reverse Playback	32
Monitor Movement mechanism	13	Slow Forward / Slow Reverse Playback	33
5. Basic Operation		Playback Previous / Next Chapter	33
Power On / Off	14	Repeat Playback	34
Muting	14	Repeat A - B	35
Playing Source Selection	14	Random Playback	35
Volume Adjustment	15	Scan Playback	36
Audio Control	15	Alter between 2-Ch. & 6-Ch.	36
Adjusting Clock	18	GOTO Search	38
System Reset	20	Direct Chapter/Track Selection	39
Auto Brightness Control	20	Audio Track Selection	40
Line Mute	20	Main Menu / Title menu	40
6. Touch Screen Operation		Zoom Image	41
Main Menu	21	Subtitle Language Selection	41
Touch operation on DVD Player	21	Angle Selection	41
Touch operation on Radio	21	PBC Function	42
Touch operation on SD card	22	Playback Information	42
7. Radio Tuner		MP3 / WMA Playback	44
User Interface	23		
Info Display on LCD	23	10. SD Card	
Operation	24	User Interface	45
Switch Radio Tuner Source	24	Switch to SD card source	46
Select FM / AM Band	24	Pause Playback	46
Auto Tuning	24	Stop Playback	46
Manual Tuning	25	Repeat Playback	46
Auto Preset Memory	25	Shuffle Playback	46
Manual Preset Memory	25	Playback Previous/Next Chapter	46
Recall Preset Station	26	Switch the Direction	47
Scan Tuning	26	Previous/Next Page	47
Local Radio Station Seeking (LOC)	26	Audio Track Selection	47
		Direct Chapter/Track Selection	47
8. RDS Operation			
RDS Interface	27	11. iPod Connection	
Searching The PTY(Program Type)	27	Accessing iPod Mode	48
PTY Alarm	28	Controlling Your iPod	48
		Music Playback	48
		Photo Playback	49
		Video Playback	49
		Fast Forward/Fast Reverse	49
		Search Playlist/Artist/Album/Song	50

**12. System Setup**

General Setup Menu	51
ASP CONFIG	52
Bass Center Frequency	52
Treble Center Frequency	52
SUB.W Filter	52
SUB.W Phase	53
Bass Q-Factor	53
General Setup	54
Radio	54
Clock Mode	54
Parking	54
TV System	55
TFT Auto Open	55
OSD Language	55
Clock Adjustment	55

13.DVD Setup

Language	
Subtitle	56
Audio	57
DVD Menu	57
Video Settings	
Aspect Ratio	58
Angle Mark	59
View Mode	59
Audio Settings	
Pink Noise	60
DRC-Dynamic Range Control	60
CNTR CTRL--Center Speaker Delay	60
REAR CTRL--Rear Speakers Delay	61
Down Sampling	61
SURROUND SETUP	62
6 Channel Speaker Settings	63
DownMix-2 Channel Speaker Settings	63
SURROUND FX	
Surround Mode	64
Panorama	64
Dimension Ctrl	64
Center Width Ctrl	64
Rating	
Setup	66
Password Changing	69
Load Factory	70

14.Other Playback Modes

Aux In	71
Rear View Video Camera	71
RGB Input	71
Rear Zone	72

15.Miscellaneous

Dolby Digital 5.1 Surround Sound	73
Useful Information about Disc	73
Note on playback MP3	75
DVD Disc Orientation	77
VCD / CD Disc Orientation	77
Glossary	77
Caution of Disc Using	79

16. Troubleshooting

General	80
TFT Monitor	81
Radio Tuner	81
DVD Player	82
MP3	82
Miscellaneous Info	83

17. Remote Control

Note	84
Uninstall Battery	84
Install Battery	84

18. Electrical Connections

Note	85
Parking Brake Cable Connections	86
Reverse Drive Camera Display Cable	86
Connections	86
Electrical Connections Overall Diagram	

19.Installations

Standard Accessories	87
Note	87
Installation Procedure	89
Uninstallation Procedure	90

20. Specifications

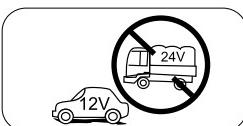
91

▶ SAFETY PRECAUTIONS

1

WARNING

1. Only connect the unit to a 12-volt power supply with negative grounding.



WARNING

2. Never install this unit where the operation will restrict safe driving .



WARNING

3. Never use the video display function in front when driving . This is a violation of traffic regulations . The rear view camera display can be used when reversed gear is engaged.



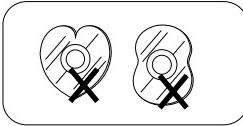
WARNING

4. Never disassemble or adjust the unit without any professional operation. For details, please consult any professional car shop / dealer for inquiry.



WARNING

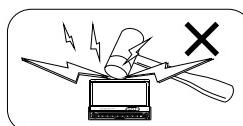
5. Never expose this unit , amplifier , and speakers to moisture or water for preventing electric sparks or fires.



6. Never use irregular disc.

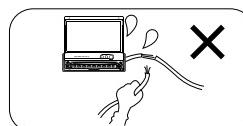
WARNING

7. No big impact to the LCD monitor when it is in open position for preventing the damage to any mechanism inside.



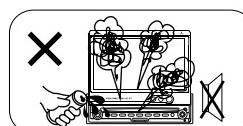
WARNING

8. Only replace the fuse with a similar rated fuse , using a incorrect fuse may cause damage to the unit .



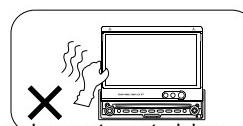
WARNING

9. Please power off this unit at once and send it back to the after-sales service center or the dealer / distributor you purchased from if one of the following symptoms is found:
(a). No audio output; (b). No image output;
(c). Water or other obstacle enters the unit;
(d). Smoking; (e). Peculiar smell



WARNING

10. The monitor employs auto-motorizing mechanism, please don't push, pull, or swivel the monitor manually to prevent damage to the core mechanism.



 **PRECAUTION** **PRECAUTION**

1. If the front panel or the monitor is dirty, please clean with soft cloth and neutral detergent. Using a rough cloth and non neutral detergent will result in scratching and discolouration of the screen.

 **PRECAUTION**

2. If any abnormal behavior of this unit was found, please refer to troubleshooting guide of this manual (please refer to page) . If no relevant information was found,please press the[RESET]key on the front panel to resume factory default.

 **PRECAUTION**

3. Car parking under direct sunlight dramatically increases the temperature inside the car in a moment. Cool down the in-car temperature by air-conditioning before any operation to this unit is recommended.

 **PRECAUTION**

4. Using in - car heater in low temperature environment may cause bead coagulates inside the unit , don't use the unit in this situation, eject the disc and wipe off the bead on the disc.If the unit still doesn't work after a few hours,connect after-sales service centre.

 **PRECAUTION**

5. To ensure safe driving, please adjust the volume to a safe & comfort level in case of emergency situations.

 **PRECAUTION** **PRECAUTION**

6. Clean up the laser pickup more often than the home used counterpart due to the worse environment to the unit in car.

 **PRECAUTION**

7. To provide a clear demonstration and an alternative for easy understanding of the operation of this unit, graphic illustration was used. However, this illustration is not necessary printed as the actual image you may found on the unit.

 **PRECAUTION**

8. During operating this unit, "⊖" is displayed if that particular operation is not available nor illegal.

 **PRECAUTION**

9. Operate this unit correctly as the manual instruction accordingly to prevent unnecessary problem.Guarantee won't be valid if the problem is caused by inappropriate operation.

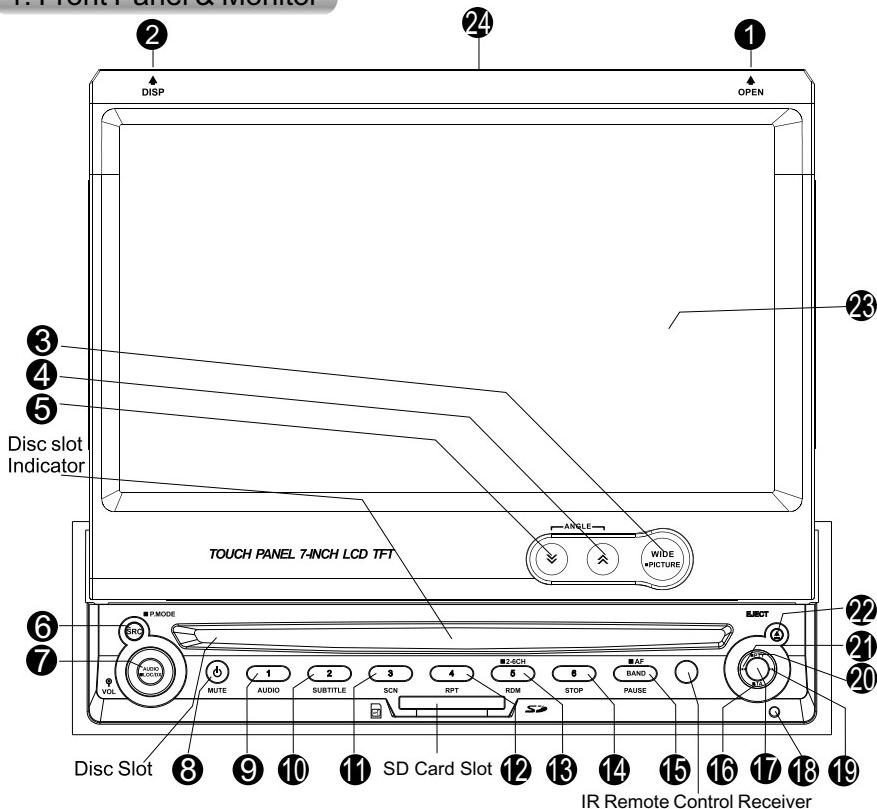
Manufactured under license from Dolby Laboratories. "Dolby" , "Pro Logic " and the double-D symbol are trademarks of Dolby Laboratories.

▶ MAIN FEATURES

- 2
1. 1 DIN Size
 2. Ultra slim slot-in DVD core mechanism.
 3. 7 inch Grade A TFT monitor.
 4. Built-in 4x45W power amplifier & 5.1 channel audio output (RCA).
 5. Dual zone independent playing mode
This unit provides dual zone independent playing mode.
 6. Built-in FM / AM Tuner
 - ① Auto / Manual search for radio station and preset station memory.
 - ② 30 preset radio stations (12 AM + 18 FM)
 - ③ Distance / Local radio station seeking
 - ④ Radio station scan tuning.
 7. Multi TV video System
Auto / Manual PAL & NTSC video system selection.
 8. Dual LCD Display
Wide screen TFT display & segment LCD display
 9. 4 Different Screen Aspect Ratio
FULL , WIDE , NORMAL , OFF .
 10. TFT Automatic Swiveling Mechanism
Simply press a button to adjust the TFT monitor display angle in full range or step by step is as easy as clapping your hand. Last position memory memorize your favorite viewing position.
 11. Auto Activated Rear View Video Camera
Reverse driving automatically activates the TFT monitor & the rear view video camera, image captured from the camera is displayed.
 12. TFT monitor swiveling mechanism
overloaded protection.
During the TFT movement, once the monitor was overloaded by blocking or unclear moving path, its motion is ceased automatically to protect the mechanism.
 13. Fully Compatible with CDDA, VCD, SVCD, CD - R, CD-RW, DVD, DVD±R, DVD±RW, MP3, WMA, JPEG, Picture CD.
 14. Dolby Digital 5.1 & Dolby Pro Logic II ready
 15. Dolby Pro Logic II decode settings
 - ① Decode mode:PRO LOGIC,PLL Matrix, PLL Movie,PLL Music,Hall Effect.
 - ② Sound field effect:natural,jazz club, concert hall,stadium,4 stereo.
 - ③ Dimension control.
 - ④ Centre width control.
 - ⑤ Panorama setting.
 16. Multi-language, Multi-subtitle, Multi-angle Playback Options.
 17. Last Playback Memory
When powering on the unit, every single setting & playing status remain the same as that during power off.
 18. Making fine adjustment for bass / treble center frequency、SUB.W filter frequency, SUB.W phase and bass Q-factor.
 19. Mute Function
Auto lower / mute the volume when dedicated external device such as GPS system or car phone is active.
 20. Joystick (5-way) Control
The joystick provides easy navigation control via 4-directional control plus a clickable control.
 21. Making fine adjustment for electronic volume, bass, treble, balance, fader.
 22. Ultra slim card size full function IR remote controls for the front zone and the rear zone control.
 23. Mechanical Anti-Vibration System +
Electronic Shock Protection
Our reputation winning mechanical anti-vibration system accompany with 16MB Electronic Shock Protection promotes the smoothest disc playback possible even in the toughest road conditions.



1. Front Panel & Monitor



1. [▲] Key

- Short press to slide down / up monitor

2.[DISP] Key

- Short press to display info on screen
- Long press to enter / exit MAIN MENU.

3. [WIDE/■PICTURE] Key

- Short press to adjust display aspect
- Short press to adjust PICTURE setting
- Long press to enter / exit PICTURE setting

4.[▼] Key

- Short press to increase 1 step of tilt angle
- Long press to continuously increase the tilt angle

5.[▼] Key

- Short press to decrease 1 step of tilt angle
- Long press to continuously decrease the tilt angle

6.[SRC] Key

- Short press select playing mode

7.[VOL/LO/DX] Knob / Key

- Rotate the knob to adjust volume
- Short press to enter audio setting
- Short press to confirm audio setting
- Long press to toggle Local / Distance for radio station searching

▶ BEFORE USE

8.[POWER/MUTE] Key

- Short press to power on the unit
- Short press to mute the volume
- Long press to power off the unit

9. [1/AUDIO/DISC-] Key

- Short press select audio language during playback (in DVD Player,SD CARD source)
- Short press play preset radio station channel 1
- Long press store current radio station to channel 1

10. [2/SUBTITLE /DISC+] Key

- Short press select subtitle language during playback (in DVD source)
- Short press play preset radio station channel 2
- Long press store current radio station to channel 2

11. [3/SCN] Key

- Short press start scan playback(in DVD/source)
- Short press play preset radio station channel 3
- Long press store current radio station to channel 3

12. [4/RPT] Key

- Short press start repeat playback(in DVD / SD CARD source)
- Short press play preset radio station channel 4
- Long press store current radio station to channel 4

13. [5/■2-6CH /RDM] Key

- Short press, random playback(in DVD /SD CARD source)
- Short press play preset radio station channel 5
- Long press store current radio station to channel 5
- Long press alter between 2 channel & 6 channel audio output

14. [6/STOP] Key

- Short press stop a playback (in DVD / SD CARD source)
- Short press play preset radio station channel 6
- Long press store current radio station to channel 6

15. [■AF/BAND/PAUSE] Key

- Short press alter between FM & AM

16. [■TA] Key

- Short press enters slow forward/slow reverse (in DVD source)
- Short press move cursor down in menu setting

17. [PLAY / ENTER / SCAN / AME] Key

- Short press starts a playback(in DVD / SD CARD source)
- Short press to confirm a selection
- Short press scan playing FM/AM radio station
- Long press auto store FM / AM radio station

18.[RESET] Key

- Short press reset system settings to factory default(except password & parental lock setting)

19.[►►] Key

- Short press enters next chapter / track (in DVD/SD CARD source)
- Short press move cursor right in menu setting
- Long press increase tuning frequency step by step (in Tuner source).

20.[■PTY] Key

- Short press enters fast forward / fast reverse (in DVD source)
- Short press move cursor up in menu setting

21.[◄◄] Key

- Short press playback previous chapter/track (in DVD / SD CARD source)
- Short press auto search for the previous available radio station
- Short press move cursor left in menu setting
- Long press decrease tuning frequency step by step (in Tuner source)

22.[▲] Key

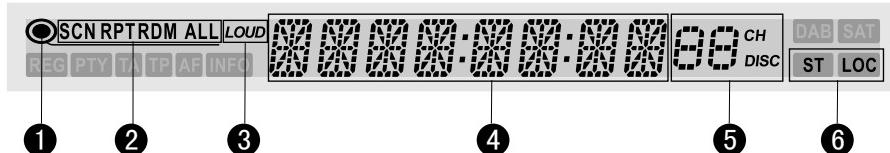
- Short press, disc insertion / ejection
- Long press, reset core mechanism position

23.TFT Display

24.LCD Display

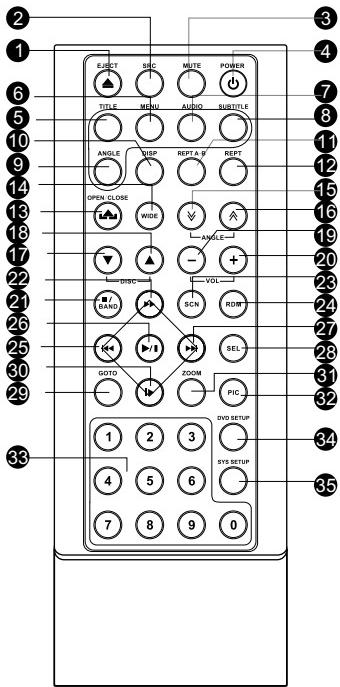


2. LCD Display



- 3
-
- ① Disc indicator
Lit up when disc is inside
Light off when no disc is inside
-
- ② SCN,RPT,RDM,ALL are indicators for DVD playback. Lit up when the function is active. Light off when the fuction is inactive.
- SCN : scan playback indicator
RPT : repeat playback indicator
RDM : random playback indicator
ALL : playback all chapters indicator
-
- ③ LOUD : Loudness indicator
Lit up when LOUD is active
Light off when LOUD is inactive
-
- ④ Main display: display time info,tuning frequency,other text info
-
- ⑤ 2 digit 7 segment LCD display for radio channel no. The LCD lits up when radio is active.
-
- ⑥ ST : Stereo indicator lit up when radio is in stereo mode
LOC : Local indicator lit up when local radio station seeking in active

3. Remote Control For Front Zone



Function Description

1. [▲/EJECT] key

- Open / Close the TFT monitor

2.[SRC] Key

- Select playback source

3.[MUTE] Key

- Toggle on / off volume output

4.[□/POWER] Key

- Turn on / off the power

5.[TITLE] Key

- Enter the title menu of the disc (in DVD source)

6.[MENU] Key

- Enter the main menu of the disc (in DVD source)
- Turn on PBC when playing VCD

7.[AUDIO] Key

- Change the audio track during playback DVD, VCD or SD Card.

8.[SUBTITLE] Key

- Alter subtitle language during playback a DVD disc.

9. [ANGLE] key

- Playback DVD disc in different angle on a scene
- Playback Picture CD with different angle of picture displayed

10.[DISP] Key

- Display playback information

11.[REPT A-B] Key

- Setup to repeat playback from time frame A to time frame B (in DVD source)

12.[REPT] Key

- Setup to repeat playback each chapter / title / disc (in DVD source)

13.[▲/OPEN/CLOSE] key

- Open / Close the monitor.

14.[WIDE] key

- Select Aspect Ratio mode

15. [ANGLE/▼]

- Decrease monitor tilt angle position

16.[ANGLE/▲]

- Increase monitor tilt angle position

17.[DISC▼] Key

- Select the next disc to playback in DVDC source.

18.[DISC▲] Key

- Select the previous disc to playback in DVDC source.

19. [VOL -] key

- Decrease volume

20.[VOL +] key

- Increase volume

21. [■ / BAND] key

- stop playback
- select FM / AM band

22. [►] Key

- Fast forward the current disc in DVD source
- During menu setup, move to upper selection
- Change to a previous TV channel.

23. [Scn] Key

- Play the first ten second of each chapter in CD Changer .

24.[RDM] Key

- Play all chapters in random order in CD Changer orDVD player.

25. [◀◀] Key

- Select the previous track / chapter for playback
- During menu setup, move to left selection
- Searching an available FM/AM radio station by decreasing tuning frequency
- Decrease tuning frequency of TV tuner

26.[►/I] Key

- Pause a playback
- Start playback
- Act as ENTER for menu setup
- Scan tuning FM / AM radio station & play

27.[►▷] Key

- Select the next track / chapter for playback
- During menu setup, move to the right selection
- Searching an available FM/AM radio station by increasing tuning frequency
- Increasing tuning frequency of TV tuner

28.[SEL] Key

- Enter/Exit the audio adjustment mode.

29. [GOTO] key

- Goto specific time frame and playback

30. [▶] Key

- Slow playback disc in DVD source
- Slow rewind playback disc in DVD source)
- During menu setup,move to the lower selection

31. [ZOOM] key

- Zoom in image during playback DVD/VCD disc.

32.[PIC] key

- Setup monitor image parameter

33.Numeric keypad

34. [DVD SETUP] key

- Setup for DVD player playback function

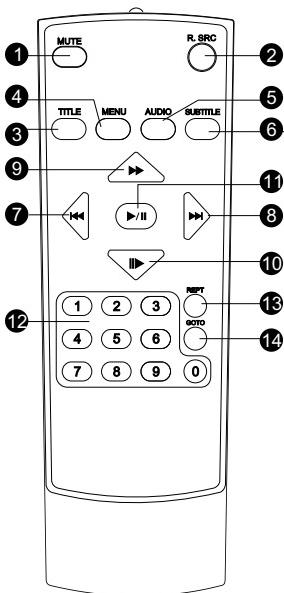
35.[SYS SETUP] key

- System function setup of the unit



BEFORE USE

4. Remote Control for Rear Zone



Function Description

1. [MUTE] key

- Turn on / off volume output

2.[R.SRC] key

- Playing source selection for rear zone

3.[TITLE] key

- Enter the title menu of the disc (in DVD Player)

4. [MENU] key

- Enter the main menu of the disc(in DVD Source)
- Turn on PBC when playing VCD,

5.[AUDIO] key

- Switch the audio language for disc playback

6. [SUBTITLE] key

- Language selection for subtitle (in DVD source)

7.[◀◀] Key

- Select the previous track / chapter for playback.
- During menu setup,move cursor to left selection.
- Decrease tuning frequency of TV tuner.

8.[▶▶] Key

- Select the next track / chapter for playback.
- During menu setup,move the right selection
- Increase tuning frequency of TV tuner.

9.[▶▶] Key

- In DVD source, fast forward the disc content
- During menu setup, move to upper selection
- Change to a previous TV channel.

10.[◀▶] Key

- Slow playback (in DVD source)
- Slow rewind playback (in DVD source)
- During menu setup, move to lower selection
- Change to next stored TV channel.



11. [▶/II] Key

- Pause a playback.
- Start a playback.
- Act as ENTER for menu setup.

12. Numeric keypad

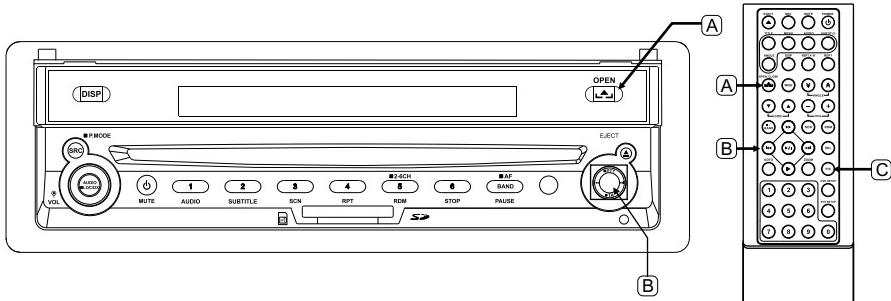
13. [REPT] key

- Setup to repeat playback each chapter / title / disc

14. [GOTO] Key

- Goto specific time frame and playback

► MONITOR OPERATION



1. Open / Close TFT Monitor

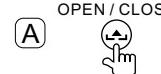
1) Open TFT Monitor

Short press [OPEN] key on the front panel or press the [▲] key of the remote control for front zone activate the display to the last viewing position.



2) Close TFT Monitor

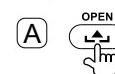
Short press [OPEN] key on the front panel or press the [▲] key of the remote control for front zone load in the display back to the compartment.



2. TFT Monitor Auto Open

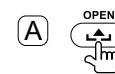
1) If "TFT Auto Open" is "on", power on the monitor will go to its last position.

2) If "TFT Auto Open" is off, only press [OPEN] or [▲] key to open the monitor after power on the unit.



Note : • Please refer to <TFT Auto Open>.

If "TFT Auto Open" is off, the monitor will not come out automatically after the unit power on. [Open] or [▲] button must be pressed to make the monitor out.



3. When Reverse Driving

If the rear view video camera connected and the unit is on, when the monitor was stationed inside the main compartment of the unit, the monitor automatically move to the last display position upon reverse driving. When the reverse driving is done, the monitor retreat back to the main compartment.

When the monitor was in display mode, the monitor automatically switch to CAMERA mode upon reverse driving. When the reverse driving is done, the monitor switch back to its original content.

4. Monitor Tilt Angle Adjustment

By LCD characteristic,different angle different result of display.The monitor angle can be adjust for better and best view.

1) Continuous Viewing Angle Adjustment

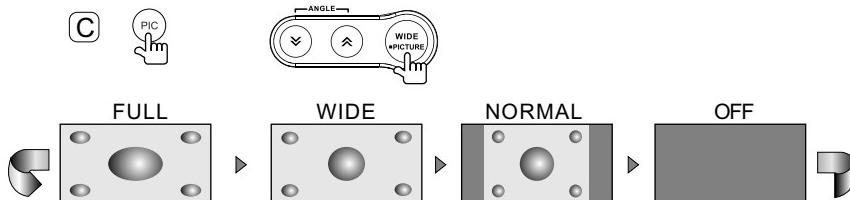
Long press [][] key on monitor, monitor tilt angle increases / decreases accordingly

2) Viewing Angle Adjustment By Step

Short press [][] key on remote control / monitor,press once to increase/decrease tilt angle by one step.

5. Aspect Ratio

Press the[PIC]key on remote control or [WIDE/ ■ PICTURE] key on monitor. The aspect ratio alters according to the following:



- The screen is extended horizontally as a whole to the aspect ratio of 16 to 9
- The extension ratio is the same at any point of the screen

- The screen is extended horizontally to the aspect ratio of 16 to 9
- The extension ratio increases toward the right and left ends of the screen

- The conventional display image has a 4 to 3 ratio of horizontal to vertical.
- In this case,a blank area remains on the right and left sides of the display

6. Image Setting

1) The video output format for the 5 playing sources is listed as below:

Playing Source	Video Output Format
TUNER	RGB mode
DVD	RGB mode
AUX IN	CVBS mode
CAMERA	CVBS mode

2) Adjustable Parameters

In RGB mode, only BRIGHT is available for adjustment.

In CVBS mode, PICTURE, COLOR,CONTRAST, BRIGHT, and TINT are available for adjustment.

Parameter Displayed	Parameter Adjusted	Adjustment Range
PICTURE	Sharpness	- 10 to +10
COLOR	Color	- 10 to +10
CONTRAST	Contrast	- 10 to +10
BRIGHT	Brightness	- 10 to +10
TINT	Tint	- 10 to +10

Note : ♦The default adjustment value is 0.

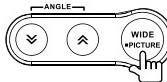
♦In PAL mode, Tint is unavailable for adjustment.

► MONITOR OPERATION

3) Parameter Adjustment Procedure

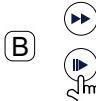
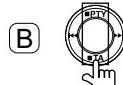
① Enter picture quality setting mode

Press [PIC] key on remote or long press button [WIDE/PICTURE] on monitor panel.



② Select Setting item

Press [▶▶]/[◀◀] on remote, or press button [PTY]/[TA] on monitor panel.



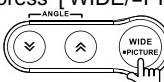
③ Setting parameters

Press key [◀◀]/[▶▶] on remote, or press button [◀◀]/[▶▶] on monitor panel.



④ Exit picture quality setting

Press key [PIC] on remote or long press [WIDE/PICTURE] on monitor panel.



7. When Parking Brake Engaged

- If "PRK SW" cable is connected to hand brake switch, the view video to the TFT monitor will be switched between Normal Display and Caution Sentence by this function.
- Parking cable function ceases upon "Parking" is "Off" or the playing source is CAMERA.

Note :

- ♦ Please refer to <Parking Brake Cable Connections> and <Reverse Drive Camera Display Cable Connections>.
- ♦ "Parking" setting, Please refer to <Parking> .

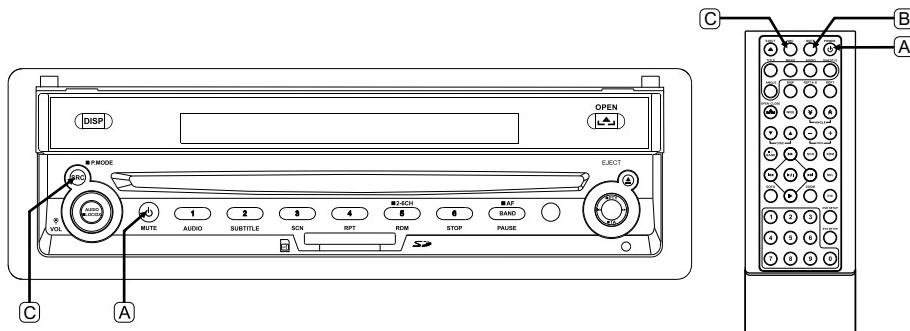
- When "Parking" is "On", the monitor at the front display the following screen to prevent the driver watching other content during driving.

ATTENTION:
DO NOT USE THIS FUNCTION

8. Monitor Movement Mechanism

Any path blocking / obstruction for the movement of the monitor occurs, the following protection executes to prevent any damage to the loader / monitor. After the protection executed, normal operation resumed after the following action of the monitor performed by pressing [OPEN] key or disconnecting & reconnecting the power.

Obstruction Blocking Situation	Self protection of this unit	After OPEN key is pressed	Disconnect & reconnect the power
Monitor loading out horizontally	Auto loading back in to the mechanism	Fully extended horizontally	Auto loading back in to the mechanism
Monitor loading in horizontally	Stop at the obstruction point	Fully extended horizontally	Loading back in to the unit
Monitor loading out vertically	Stop at the obstruction point	Swiveling back to the unit	Swiveling back to the unit
Monitor loading in vertically	Stop at the obstruction point	Swiveling back to the unit	Swiveling back to the unit



1. Power On / Off

1) Power Off

Long press [\ominus / MUTE] key on the front panel or short press[POWER]key on the remote control to power off the unit,the monitor is drew back to the main compartment, and the LCD screen shows "BYE-BYE".



5

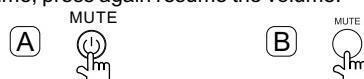
2) Power On

Short press [\ominus / MUTE] key on front panel or [POWER] key on remote control to turn on the unit. LCD display "welcome" then the unit comes back to the status when the unit was power off last time.



2. Muting

1) Short press [POWER / MUTE] key on front panel or [MUTE] key on remote control turns off volume, press again resume the volume.



2) Volume adjustment or setup audio setting cancel the mute function.(refer to <Audio Control>).

3) Mute indicator  lit up when mute is on.

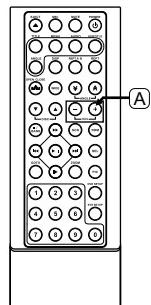
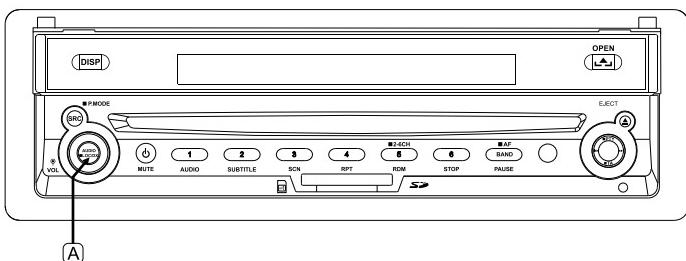
3. Playing Source Selection

Short press [SRC / □P.MODE] key on front panel or [SRC] key on remote control to alter the playing source according to the followings:



Display	Playing Source
TUNER	Radio Tuner
DVD/SD Card	DVD Player/SD Card
AUX IN	Aux In
CAMERA	Rear View Video Camera

Note: • The name of playing source is displayed on TFT & LCD screen.

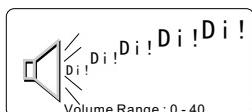


4. Volume Adjustment

- 1) To increase / decrease volume, rotate the rotary knob on front panel or press [VOL+] / [VOL-] key on remote control.



- 2) Volume ranges from 0 to 40.



Note: • When volume reaches 0 or 40, a beep sounded indicating the adjustment limit is reached.

5. Audio Control

Audio control allows you to easily adjust your audio system to meet the in-car acoustic characteristics which vary depending on the type of car and its measurement, to get the best possible sound spaciousness, be sure to make setting for the speakers as well, making setting for "FADER" and "BALANCE" boosts the effects of the cabin equalizer.

- 1) 2-channel audio control

Each playing mode has 2 channels of audio output

Playing Source	Channel
TUNER	2-Channels
DVD	2/6-Channels
AUX IN	2-Channels
CAMERA	2-Channels
SD Card	2/6-Channels

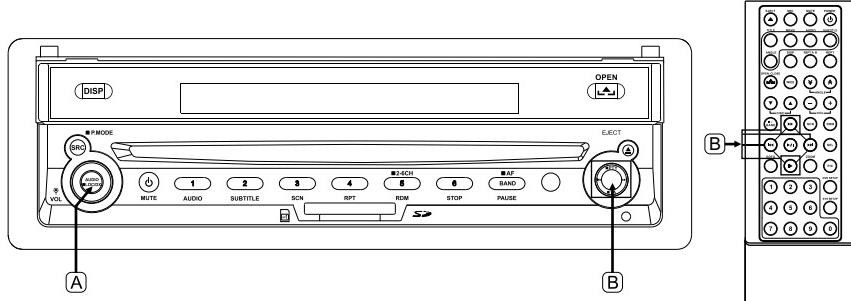
Note: • please refer to <Alter between 2 Ch. & 6 Ch> .

- 2) Audio Control Adjustment Method :

① Enter Audio Control mode

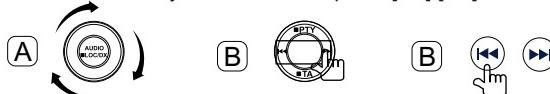
Short press [VOL/ LO/DX] key on front panel, "AUDIO" menu is displayed.





② Select the Audio item for Adjustment

Rotate the rotary volume knob, or press [◀◀]/[▶▶] on the remote control/ joystick.



③ Adjust the audio item.

Continuously short press [VOL / LO/DX] key, or press [▶▶] / [◀◀] key on remote control, or press [■PTY][■TA] of the joystick, select the audio item for adjustment.



Item	Adjustable Range	Item	Adjustable Range
EQ	User	Bass	- 14 to +14
	Flat	Treble	- 14 to +14
	Jazz	Fader	- 09 to +09
	Pop	Balance	- 09 to +09
	Classic	SW	- 7 to +7
	Rock	Loud	Off; 1 to 4
	Vocal		

Note:♦ Select EQ according to this sequence : User → Flat → Jazz → Pop → Classic → Rock → Vocal → User.

- ♦ Different EQ reflects in different Bass level & Treble level, the Bass & Treble level could be adjusted only in User(user seting) mode.
- ♦ For Bass, TrebleE adjustment, alter Bass Center Frequency & Treble Center Frequency may result a better audio output quality (please refer to <ASP CONFIG>).
- ♦ The LOUD function compensates for deficiencies in the low and high sound ranges at low volume.

You can select a desired Loudness level. Meanwhile, the "LOUD" light on the LCD will be on.

④ Exit Audio Control mode

Long press [SEL/■LOC/DX] key or stop operation for a few seconds exit audio control mode.



Long press

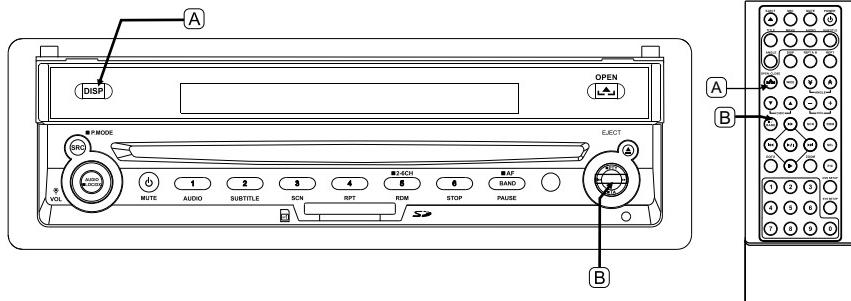
BASIC OPERATION

3) 6-channel audio control

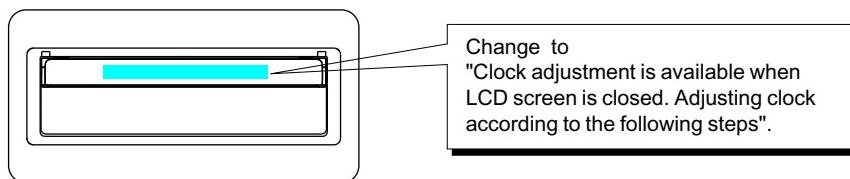
By adjusting the following speaker volume control to achieve a better audio experience.

Item	Adjustable range
Master Volume	00 to 40
Front Left Channel Volume	- 10 to +10
Front Right Channel volume	- 10 to +10
Rear Left Channel Volume	- 10 to +10
Rear Right Channel Volume	- 10 to +10
Center Channel Volume	- 10 to +10
Subwoofer Volume	- 10 to +10

- ◆ Due to different setting, no audio output may occur. For details, please refer to "Alter between 2-Ch. & 6-Ch." .
- ◆ Before adjusting the volume of any speaker, please refer to <speaker configuration> .



6. Adjusting Clock



5

1) Select Clock Display

Short press [DISP] key on the front panel, select Clock Display.

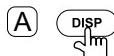


Note:

- ♦ Clock display has two mode as 24hours and 12hours, for example: under 12hours mode, "AM11:29" is morning 11:29, "PM 10:42" is 10:42 in night. Under 24hours mode, it is "22:42"
- ♦ 24hours mode/12hours mode settings, see <Clock Mode>

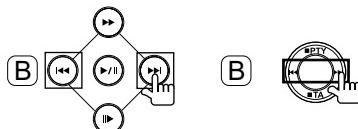
2) Enter Clock Adjustment Mode

Long press [DISP] key, enter Clock adjustment mode, the part being adjusted (hour/minute) would be blinked by 1Hz.

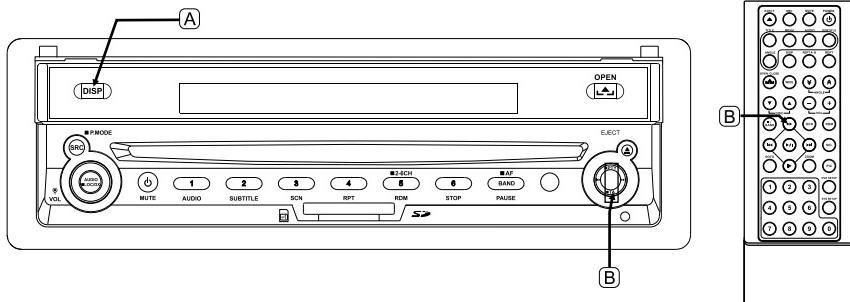


3) Select item for adjustment (Hour / Minute)

Press [◀] [▶] key on remote control/joystick, select the item needed to be adjusted

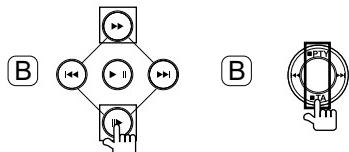


BASIC OPERATION



4) Adjust Clock

Press [▶▶] [◀◀] key on remote control or [■PTY][■TA] of joystick,to adjust time setting.
and[▶▶] [■PTY] key increase,[◀◀][■TA] key decrease.



5) Set Up Clock

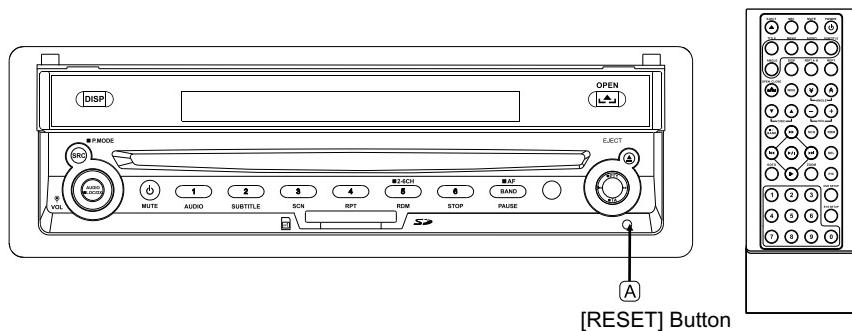
Short press [DISP] key on the front panel, confirm setup and exit Clock Setup Mode.



Note: ♦ The unit exits clock adjustment mode after no operation for a few seconds.

♦ In any playing mode, long press [DSP] key on the front panel to enter Clock Adjustment mode directly, or proceed step 2 to 5 for clock adjustment.

♦ Clock adjustment also can be made in general setup mode, please refer to <Clock Adjustment>.



7. System Reset

- 1) During system halt or other illegal operation, using a pen tip to press [RESET] button on the front panel resume normal operation.

A [RESET] Button

- 2) After system reset, the below setup will restore to the factory default value
 ① System Setup.
 ② DVD setup.
 ③ Clock ,please refer to <Clock Adjustment> and <Adjusting Clock> .
 ④ FM/AM preset radio station (Please refer to "Auto /Manual Preset Memory radio" .)
- 3) If the system is reset during DVD playback, after reset, DVD resume playback.

8. Auto Brightness Control

To avoid the display being too bright at night time,if the cable for headlight is connected to ILLUMI (for details, please refer to < Electrical Connections Overall Diagram >), turning on the headlight dim the backlight of TFT and LCD and vice versa.

9. Line Mute

If the MUTE is connected, other audio output mutes when a telephone call is received by the car phone or the verbal navigation is performed. Please refer to < Electrical Connections Overall Diagram > .

▶▶ TOUCH SCREEN OPERATION

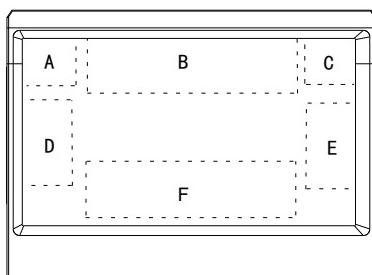
1. Main Menu

Press [MENU/SRC] key on the panel to get main menu ,and you can select a playing source or make setup on system and DVD player by touch key .



2. Touch Operation During Playing Back Image or Video Files

Positions of touch keys are showed in the screen,it indicate its function on DVD player operation.



A — Return to MAIN MENU

B — Function of the [DISP] key ,display playing information

C — Enter rear zone playing source menu

D — Select the previous file for playback

E — Select the next file for playback

F — Eject these touch key : [MENU],[▶/II],[■],[◀◀],[▶▶],[◀◀],[▶▶]

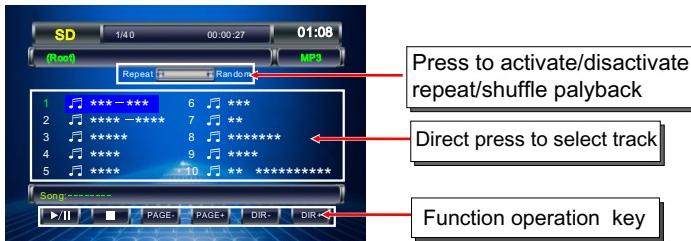
3. Touch Operation On Radio

Positions of touch keys are showed in the screen,it indicate their function on radio operations.



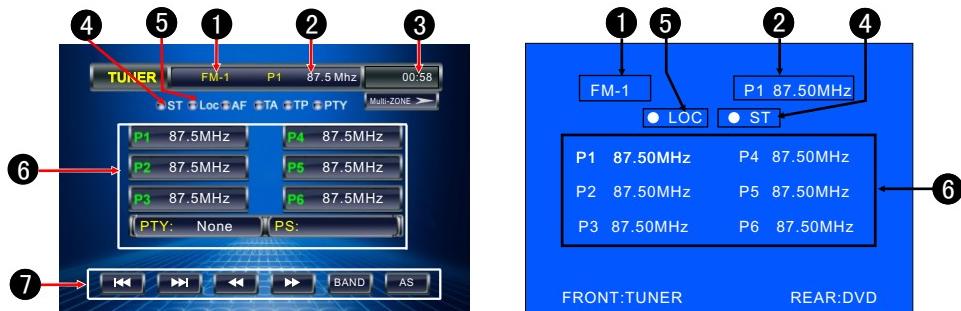
4. Touch Operation On SD Card

Positions of touch keys are showed in the screen,it indicate their function on SD card operation.



RADIO TUNER

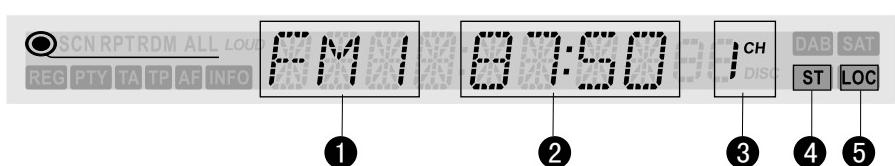
User Interface



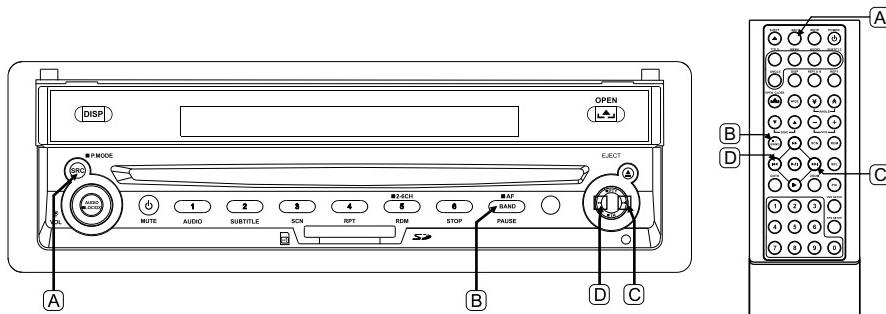
- ①.FM1 – FM Band
- ②.87.5MHz – Current Radio Frequency.
- ③.00:34 – Clock
- ④.ST – a green light indicator for receipt of stereo broadcasting,it is touch key.
- ⑤.LOC – an indicator for strong signal receipt of local radio station,it is touch key.
- ⑥.P1~P6 – preset radio stations,they are touch keys.
- ⑦.Touch keys

Info Display on LCD

7



- ①.FM1 - FM Band
- ②.87.50 - Current Radio Frequency
- ③.1CH - Current Radio Channel
- ④.ST - Stereo Broadcasting indicator
- ⑤.LOC - Strong Signal Local Broadcasting Indicator



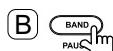
1. Switch to Radio Tuner source

Press [SRC] key on the front panel or remote control to switch to RADIO TUNNER source, the following user interface appears.



2. Select FM / AM band

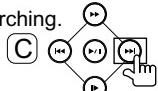
- 1) Press [BAND] key on the front panel or [■/BAND] key on the remote control to switch the band among FM1, FM2, FM3, AM1, AM2.



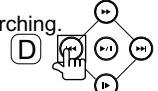
- 2) The frequency range of FM & AM are different according to the radio system. This unit offers 6 different tuning system, user could choose the proper tuning system accordingly. For detailed tuning system selection, please refer to <Radio Field> .

3. Auto Tuning

- 1) Long press [▶] key on remote control or right direction key of joystick starts seeking for next available radio station by increasing tuning frequency. Press these keys again stop the searching.



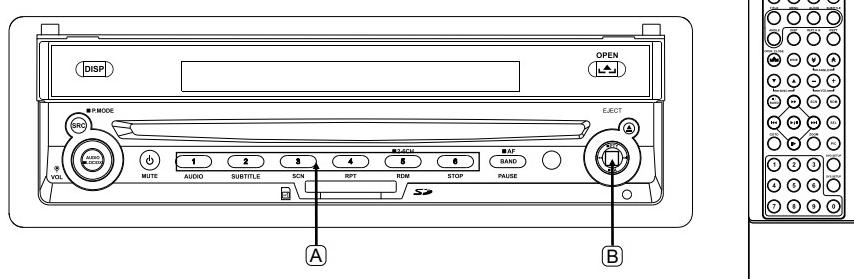
- 2) Long press [◀] key on remote control or left direction key of joystick starts seeking for previous available radio station by decreasing tuning frequency. Press these keys again stop the searching.



Note : ◆ Once a radio station was searched, the auto seeking stopped and that radio station is played.
◆ during the auto seeking, press other tuner function key stop the search.



RADIO TUNER



4. Manual Tuning

During manual tuning, frequency varies according to the minimal step for adjustment.

- 1) Press [▶] key on the remote or up direction key of the joystick ,receiving frequency increase 1 step.
- 2) Press [◀] key on the remote or down direction key of the joystick , receiving frequency decrease 1 step.

5. Auto Preset Memory

Auto searching for the valid radio stations with strongest radio signal,auto store those frequencies into preset channels. Press numeric key on the front panel recalls the preset radio station.

- 1) Press [AS] key on TFT screen or long press uprightly the joystick to search all the radio station in range from the current frequency, auto store 6 radio station channels with the strongest radio signals.According to frequency from low to high and store in P1 to P6 respectively.



- 2) Five radio bands (FM1, FM2, FM3, AM1, AM2)are available in this unit, 6 radio stations could be stored per band, a total of 30 preset radio stations are available.

Note :

- ♦ In the process of auto radio station preset memory, pressing other tuning function key exit auto preset.
- ♦ Auto store a radio station in preset channel overwrite the previous preset radio station.

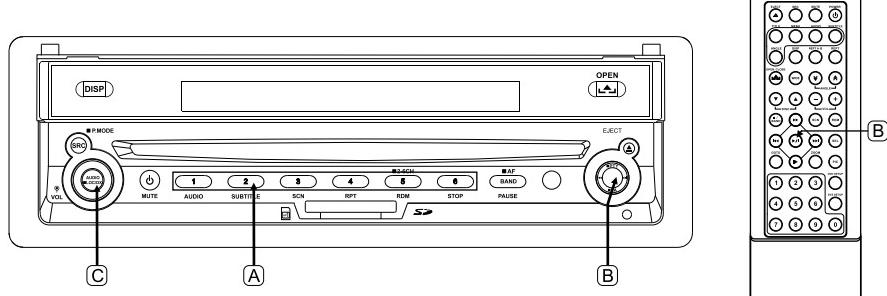
6. Manual Preset Memory

Long press key 1 to 6 on the front panel store the current radio station frequency into the preset channel pressed. For instances, current tuning frequency is 98.5 MHz, long press key '2' set channel 2 as the radio station with 98.5 Mhz



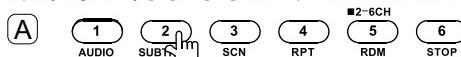
Note:

- ♦ Manually store a radio station in preset channel overwrite the previous preset radio station.
- ♦ In each band, [1] to [6] key each store 1 preset radio station.



7. Recall Preset Station

Short press key [1] to [6] on the front panel or remote control load the preset radio station channel from P1 to P6 for playing. Key [1] to [6] corresponds to Channel P1 to P6.



8. Scan Tuning

- 1) Short press uprightly the joystick to search all the radio station in range from the current frequency, playing the station for 10 seconds once a radio station is located and continue the search.
- 2) Press other tuning function key cease the radio playing.

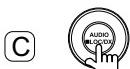


Short Press

9. Local Radio Station Seeking (LOC)

When LOCAL seeking is on, only those radio stations with strong radio signal could be played.

- 1) Long press [■LOC/DX] key on the front panel to turn on LOCAL.
- 2) Long press [■LOC/DX] key again turn off LOCAL.



Note : •LOCAL green indicators on TFT & LCD are lit up when LOCAL is activated and vice versa.

RDS OPERATION

RDS Interface



Indicator for RDS Radio Tuner

- ① ST - stereo
- ② LOC - indicates if strong radio signal is received
- ③ AF - an indicator for the activation of Alternative Frequency function
- ④ TA - an indicator for the activation of Traffic Announcement function
- ⑤ TP - an indicator for the activation of Traffic Programme function
- ⑥ PTY - an indicator for the activation of Programme Type function
- ⑦ P1~P6 - preset radio frequency to buttons & restore radio station by pressing these buttons.
- ⑧ PTY - Programme Type
- ⑨ PS - Programme Service

RT- Radio Text

This product features a tuner with RDS functions, RDS (Radio Data System) is a system that transmits broadcast station information together with FM programs.

You get display of Program Service Name and PTY(Program Type ID code), tuning to stations broadcasting a desired PTY, automatic tuning to traffic information, and emergency broadcasts and radio text display.

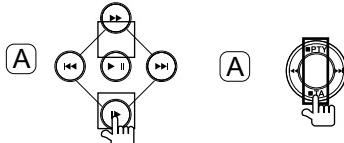
Note: • RDS service was not available in AM broadcasting
• RDS service availability depends on the FM broadcasting provider

1. Searching the PTY (Program Type)

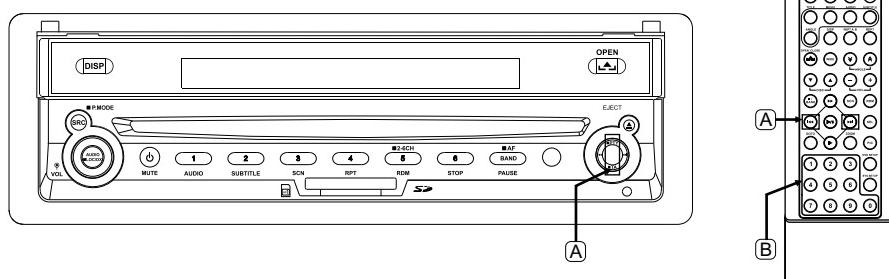
- 1) Activate PTY Search Mode
In Radio source, Long press [■PTY] key of joystick activates the PTY. Long press [■PTY] key again deactivate the PTY mode.



- 2) Select a PTY
Short press [▶][◀] key on the remote control or [■PTY][■TA] of joystick , select PTY needed and the followings displays accordingly:



NONE → NEWS → SPEECH → MUSIC → DOCUMENT → FOCK M → OLDIES → NATION M
→ COUNTRY → JAZZ → LEISURE → TRAVEL → PHONE IN → RELIGION → SOCIAL →
CHILDREN → FINANCE → WEATHER → OTHER M → CLASSICS → LIGHT M → EASY M →
ROCK M → POP M → VARIED → SCIENCE → CULTURE → DRAMA → EDUCATE → SPORT
INFO → AFFAIRS → NEWS



3) Searching for a PTY

① Auto Searching a PTY

after a PTY is selected, auto searching for next available PTY by increasing tuning frequency until the programme type of the next station matches the PTY. If no matched was found, the tuner will return to the original radio station and "NONE" is displayed.

After the searching, no matter if PTY was found, this unit auto exit the searching and PTY OFF if no any operation in 5s.

② Searching by Category

Supposed the searching category for PTY were "SPEECH" & "MUSIC", the searching ended and started playback while either criteria was met.

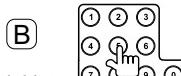
③ PTY Light

During the searching of PTY (PTY is ON), "PTY" was shown & blinked on the TFT & "PTY" indicator was lit up.

4) Save PTY

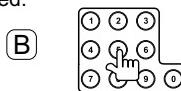
When PTY is on, press [1] to [6] key on the remote control store the current program type to the channel selected & overwrite it. the default preset channel for PTY:P1-DNEWS, P2-DSPEECH, P3-DSPORT, P4-DPOP M, P5-CLASSIC, P6-DMUSIC.

8



5) Searching the PTY quickly

When PTY is on, press [1]to[6] key on the remote control to play the preset station, then choose other station as needed.



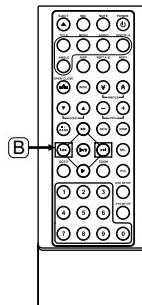
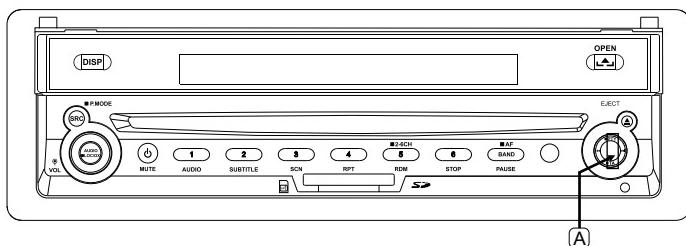
6) Quit the PTY mode

During the searching of PTY, press other tuning function key stops the PTY searching, Long press [△]key or after PTY stations was searched exit the PTY searching mode

2. PTY Alarm

PTY alarm functions automatically during emergency announcement broadcasting such as natural disaster announcement regardless what media source you are playing. If the tuner receives a radio alarm code, "ALARM" is displayed, and the tuner switches to receive emergency announcement.

Note: • The system switches back to the original source following emergency announcement reception.
• There are not buttons can cancel the announcement during announcement reception.



3. TA Function

The TA (Traffic Announcement standby) function lets you receive traffic announcements automatically, no matter what source you are listening to. The TA function can be activated for a TP station (a station that broadcasts traffic information).

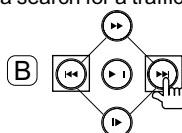
1) Turning On / Off The TA Function

Press [■TA] key of joystick for 2 seconds to activate /deactivate the TA function , and the "TA" indicator is highlighted.



2) Searching The Traffic Announcements

When TA is activated, pressing the [◀◀][▶▶] key on the remote control or the [◀◀][▶▶] of joystick ,the radio tuner starts a search for a traffic station else.



3). Searching the traffic announcements in any source other than tuner

When TA is activated and a traffic announcement is received, the current playing source is overridden by the traffic announcement, if the tuner was last set to the FM band but not if it was last set to the AM band. And the "TA" indicator lights, indicating that the tuner is waiting for traffic announcements.

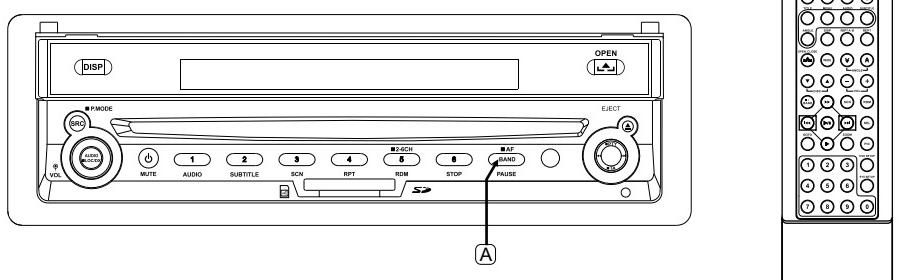
The system switches back to the original playing source when traffic announcement is finished.

Note: •Switch on TA when the tuner is off,the receiver will attempt to seek a TP station all the time.At this status,if user switch source to tuner,the frequency may differ from the frequency when the tuner was switched off.

4. Canceling Traffic Announcements

Press [■TA] key of joystick for seconds to exit TA function and cancel the current traffic announcement.





5. AF (Alternative Frequency / Auto Following)

In FM mode, long press [■AF / BAND / PAUSE] key on the front panel activate /deactivate AF function. When AF is activated & a radio signal is too weak, the tuner automatically switches to the best alternative channel.



Note: ♦ During Auto switching radio frequency, some interference could be heard.Turn off AF function can cease this issue.

6. Region

When AF is activate and Region is set "On "(Region setting please refer to part "RDS SETUP" of System Setup), Auto tuning to those stations within the region assigned;When AF is activated and Region is set to "Off", Auto tuning to those stations without any region boundary.

7. CT (Clock Time)

Some stations broadcast the time and date within the encoded RDS signal. The clock time is automatically adjusted when "CT" is set to "ON". (CT setting please refer to part "RDS SETUP" of System Setup)

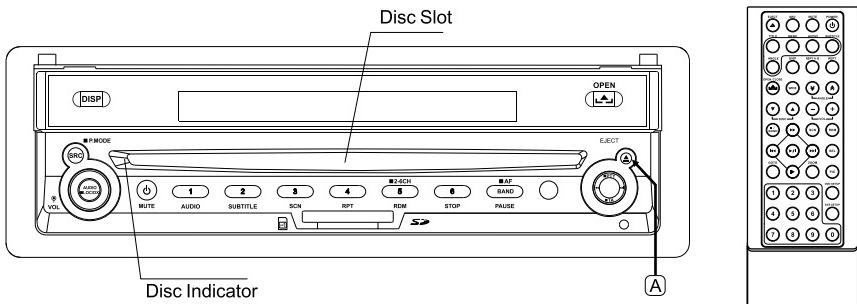
8

8. RT (Radio Text)

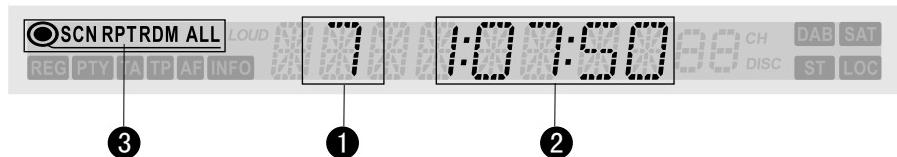
When this function is activated and this tuner displays short message data transmitted from the provider, such as station information, the name of the current broadcasting song and the name of the artist.

9. PI Search

When RDS signal is lost for a long period, the radio will automatically search a frequency matching with current station PI each 2 minutes , to switch to a station playing the same program.



Info Display on LCD



- ① 7---- current playing chapter
- ② 1:07:50---Current playback time
- ③ SCN---scan playback; RPT---repeat playback; RDM---random playback; ALL---playback all disc

1. Insert Disc

- 1) Once a disc is inserted, DVD mode is then entered, an indicator on LCD lit up.
- 2) No disc could be inserted when disc was inside the unit or during power off.

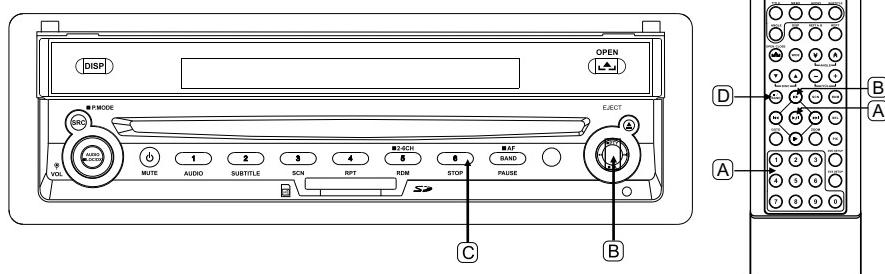
Note : ♦ CD-R,CD-RW,DVD±R,DVD±RW without terminated could not be played.
♦ For caution for disc using, please refer to "Basic knowledge for disc".

9

2. Disc Ejection

- 1). When this unit is power on, press [▲] key to eject disc inside.
- 2). Eject disc in DVD mode automatically switch to TUNER mode.
- 3). Eject disc during power off is available and the unit remains power off after the disc was ejected.





3. Pause Playback

During DVD,VCD,CD,MP3 playback: press [PAUSE] key on front panel or [▶/II] key on remote control pause the playback, press one of these keys again resume normal playback.



4. Stop Playback

During DVD,VCD,CD,MP3 playback:

- 1) During DVD / VCD / CD playback, press [STOP] key on front panel or [■/BAND] key on remote control once stop the playback and the relevant location on the disc was saved, press [▶/II] key on remote control or [PLAY] key of joystick resumes the playback from the saved disc location.

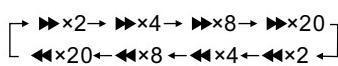
2) Press [STOP] key twice cease the playback. Press [▶/II] key on remote control or [PLAY] key of joystick starts the playback from the very beginning - the Title page of the DVD or the first track of VCD / CD.



5. Fast Forward / Fast Reverse Playback

During DVD,VCD,CD playback:

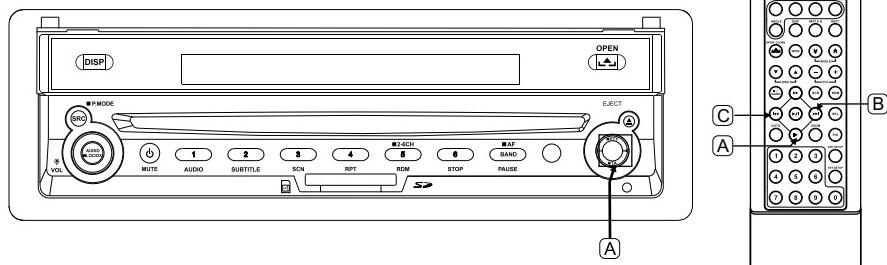
- 1) Short press [PTY] key of joystick or [▶] key on remote control, each successive press change the playback speed according to the following:



- 2) During fast forward and reversing, press [▶|◀] key on remote control or [PLAY] key of joystick to resume normal playback.



Note : •When CD is in fast forward /reverse playback mode, audio output is activated.
•When MP3 & JPEG is playing, this function is not available.



6. Slow Forward / Slow Reverse Playback

During DVD,VCD (PBC OFF) playback:

- 1) Short pressing [■TA] key of the joystick or [■▶] key on the remote control repeatedly to start slow motion playback, the playback speed will change as following table:

Pressing Times	Display on TFT	Playback Speed against Normal
1 time	■ 1 / 2	1 / 2 times forward
2 times	■ 1 / 4	1 / 4 times forward
3 times	■ 1 / 6	1 / 6 times forward
4 times	■ 1 / 7	1 / 7 times forward
5 times	◀ 1 / 2	1 / 2 times reverse
6 times	◀ 1 / 4	1 / 4 times reverse
7 times	◀ 1 / 6	1 / 6 times reverse
8 times	◀ 1 / 7	1 / 7 times reverse
9 times	Play	1 times forward



- 2) During slow motion playback, Press[PLAY]key on joystick, [■▶] key on remote control to resume normal playback. Pressing [PAUSE] or [■/BAND] key will cancel slow motion playback and the corresponding function will be performed.

Note : •This function is not available for CDDA, MP3, JPEG.

7. Playback Previous / Next Chapter

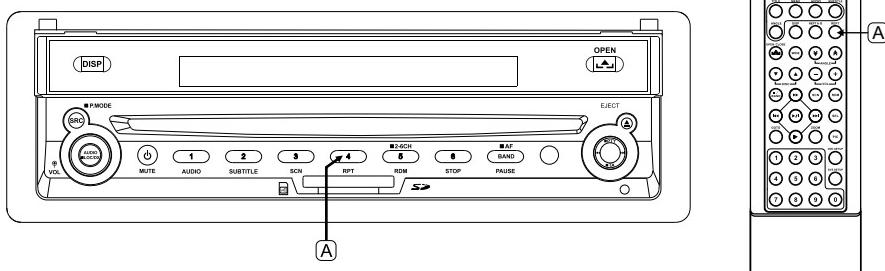
- 1) Press[◀] / [▶]key on remote control or[◀] / [▶]key of joystick to enter previous / next segment for playback.

Disc	Segment
DVD	Chapter
VCD [PBC On]	_____
VCD [PBC Off]	Track
CD	Track
MP3	File



- 2) For CD or MP3, if current track has been played back for more than or equal to 5 seconds, pressing [◀] key on the remote control or [◀] key of the joystick, playback will go to the beginning of the current track; otherwise, the next track.





8. Repeat Playback

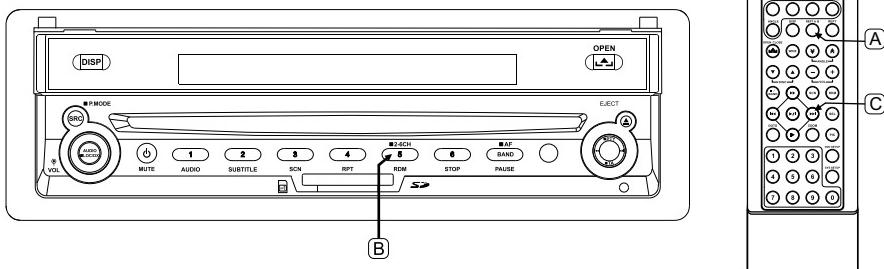
Press [RPT] key on front panel or [REPT] key on remote control to alter repeat mode as following:



- 1) DVD : "Repeat Title" → "Repeat Chapter" → "Repeat Off".
- 2) VCD (PBC Off) /CD : "Repeat Single" → "Repeat Off".
- 3) MP3 : "Repeat Single" → "Repeat Folder" → "Repeat Off".

Note : ♦No repeat function if PBC is on for VCD.

- ♦Auto repeat disc playback for CDDA.
- ♦Power off or switching modes back to DVD mode will cancel repeat playback.
- ♦"RPT" indicator lit up when repeat playback is activated.



9. Repeat A - B

During DVD, VCD, CD playback, repeat playback for time frame "A" to B is available.
Press [REPT A-B] key once on the remote control to setup a starting point "A".
Press this key again to setup an ending point B repeat playback from point "A" to point "B".
Press [REPT A-B] key again to cancel the repeat function and resume normal playback.

Display	repeat playback
Rep A -	Starting point for repeat playback
Rep A - B	Ending point for repeat playback
Rep Off	Cancel repeat playback A-B

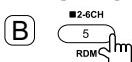


10. Random Playback

When DVD, VCD, CD is playing, all the chapters / tracks are randomly played back.

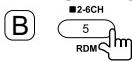
1) Activate random playback

Press [RDM] key on the front panel activate random playback, "Shuffle On" is displayed.



2) Deactivate random playback

Press [RDM] key again to deactivate random playback, "Shuffle Off" is displayed.

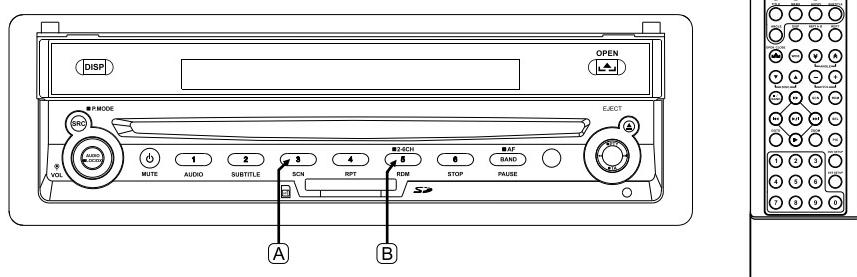


3) Press [▶] key to playback the next random chapter / track.



Note : ♦PBC will be off automatically when random playback is activated if the PCB is on before random playback is activated.

♦"RDM" indicator in LCD screen lit up when random playback is activated.

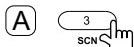


11. Scan Playback

Scan playback VCD & CD-DA only playbacks the first 10 seconds of all the tracks of the disc.

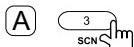
1) Activate Scan Playback

Pressing [SCN] key on the remote control to activate scan playback "Scan On" is displayed on the TFT screen.



2) Deactivate Scan Playback

Press [SCN] key resume normal playback and Scan Off is displayed on the TFT screen.



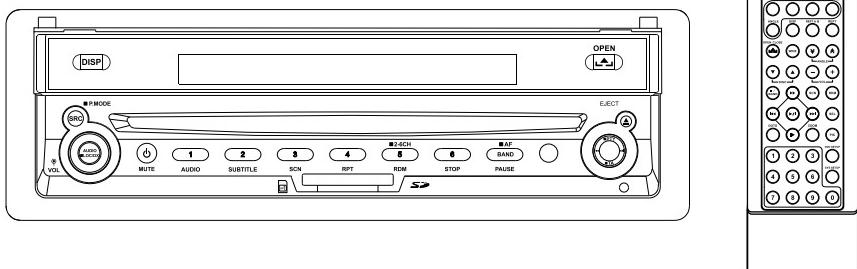
Note: ♦ PBC will be off automatically when scan playback is activated if the PCB is on before scan playback is activated.

♦ When both random playback & scan playback are activated, scan playback randomly.
"SCN" lit up when scan playback is activated.

12. Alter between 2-Ch. & 6-Ch.

1) Long press [■2-6CH] key on the front panel alter audio output between 2-channel and 6-channel.

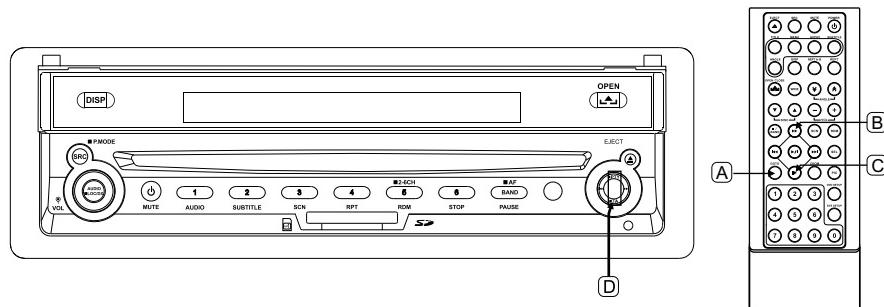




2) according to channel selected and Speaker setup, different audio output varies according to the following table. ("★" indicates audio output is available)

Description	Front Speakers	Rear Speakers	Centre Speaker	Subwoofer
2-channel mode	★	★		
Play the 2-channel audio in the 6-channel mode with Dolby Pro-Logic function off.	★			
Play the 2-channel audio in the 6-channel mode with Dolby Pro-Logic function on.	★	★	★	★
Play the 6-channel audio in the 6-channel mode.	★	★	★	★

Note : •The information of the above table is valid only when the setup values of "Front Speaker", "Centre Speaker", "Surround Speaker" are all set in low.
 •"2-channel audio" is linear PCM (eg. CD & MP3 audio).
 •"6-channel audio" for DVD (i.e. 5.1 channel Dolby Digital Audio and DTS audio).
 •Regarding Dolby Pro-Logic setup, please refer to "Pro Logic II"



13. Goto Search

During DVD, VCD playback, setup GOTO as following:

1) Enter GOTO mode

Press [GOTO] key on remote control to enter "GO TO" mode and the menu is displayed on the screen.



2) Select different categories in GOTO mode

Pressing [▶] / [◀] key on the remote control or [■PTY]/[■TA] key of the joystick to move the blue cursor.

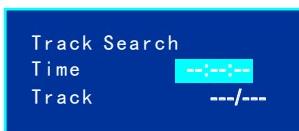


◆ For DVD, either Time or Title / Chapter is available.



"Title" - - Go to specific time of a title
"Title / Chapter" - - Go to specific time of a chapter

◆ For VCD, press [GOTO] key to alter among "Track", "Disc", "Exit"

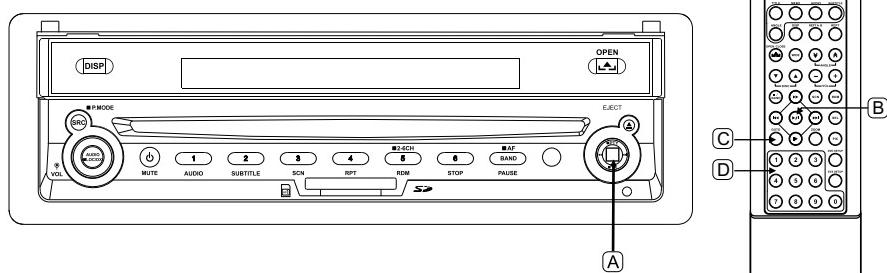


"Time" - - Go to specific time in the current track
"Track" - - Go to specific track in a VCD



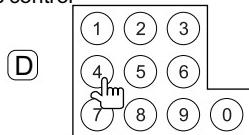
"Time" - - Go to specific time in a VCD
"Track" - - Go to specific track in a VCD

Note : ◆ For more info on title/chapter, please refer to "The Structure of DVD Disc" and "The Structure of VCD / CD Disc".



3). Enter time for searching

Press key [▶▶][◀◀][◀◀][▶▶] on the remote control or key [■PTY][■TA][◀◀][▶▶] of the joystick to move the blue cursor to the time option, and enter the time for searching by pressing the numeric key on the remote control



For DVD : ♦To search for playback time at 1 hour 6 minute 28 second,move the blue cursor to Time, enter [1], [0], [6], [2], [8].

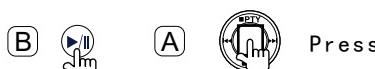
♦To search for title 2,chapter 9 move the blue cursor to "Title / Chapter",enter [2],[9].

For VCD: ♦ To search for playback time at 1 hour 14 minute 7 second Press GOTO key twice to enter Disc Search, move the blue cursor to Time, enter [1], [1], [4], [0], [7].

4). Execute the searching function

Press [▶/II] key on the remote control or key "ENTER" of the joystick to enter searching mode.

9



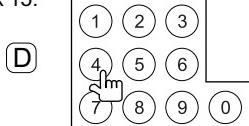
5). Exit GOTO searching mode

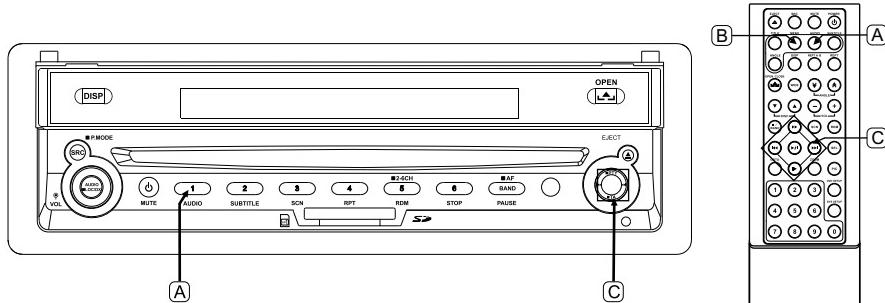
Press [GOTO] key again and again to exit GOTO mode.



14. Direct Chapter / Track Selection

During DVD & VCD &CD playback, directly press [0] to [9] key on remote control for track0-9, and press [1][5] for track 15.





15. Audio Track Selection

1) During DVD playback

Press [AUDIO] key on front panel or remote control to alter the audio track selection (i.e. select different audio language available).

2) During VCD & CD playback

Press [AUDIO] key on front panel or remote control to alter audio channel according to the followings:- Left Channel → Right Channel → Stereo



Note: •Left channel and right channel can not work property when Karaoke is not recorded in VCD correctly.

16. Main Menu & Title Menu

Only available for DVD with main menu / title menu feature, please according to the following steps to setup:-

1) Enter the main menu / title menu

Press[Menu]key on the remote control enter main menu to setup language,subtitle and etc (depends on the disc). Press [MENU] key again resume normal playback.



Press [Title] key on the remote control to enter title menu and select different titles for playback, Press key "TITLE" again to resume normal playback.

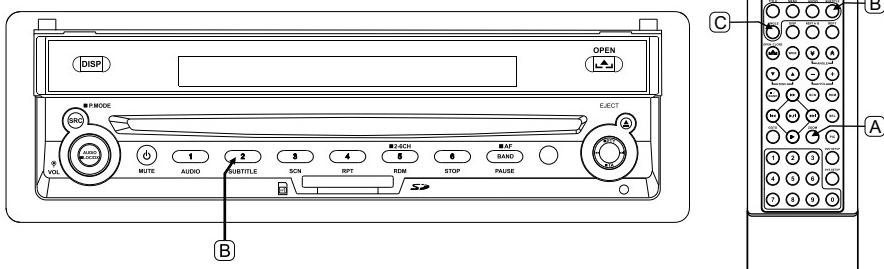
2) Enter a option

Pressing direction keys on the remote control or [PTY][TA][◀][▶] key of the joystick, move the cursor to the option you want to select.



3) Confirm Selection

Press[▶/▶]key on the remote control or[ENTER]key of joystick to confirm selection and start playback.



17. Zoom Image

During DVD, VCD playback, press [ZOOM] key on the remote control to zoom in/out the image displayed.

Display	Function
Q 1	Zoom in once
Q 2	Zoom in twice
Q 3	Zoom in 3 times
QOff	Normal Image



18. Subtitle Language Selection

Press [SUBTITLE] key on the front panel or the remote control to alter the subtitle language if more than 1 subtitle language are available in DVD.

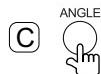


Note : • Only DVD support this feature.

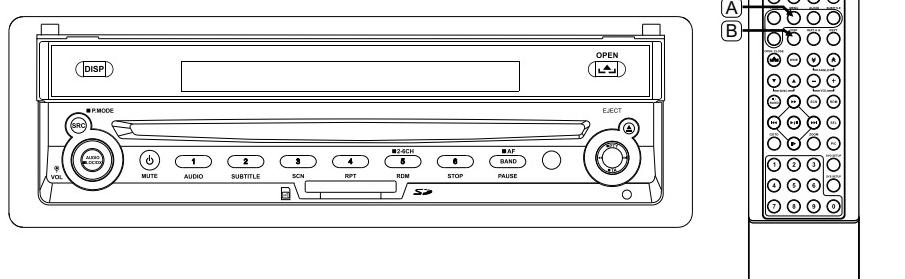
• For more details on subtitle language, please refer to Glossary for DVD / VCD / CD.

19. Angle Selection

Press [ANGLE] key on the remote control to alter the view angle of the playback if more than 1 shooting angle is recorded in DVD.



Note: • Only DVD support this feature



20. PBC Function

For VCD with play back control function, play back control (PBC) provides additional controls on VCD playback.

- 1) Press [MENU] key on the remote control toggles PBC On / Off



- 2) Once PBC is on, playback starts from the first track of the play list.

Note :

- ◆ When PBC is activated, fast forward, slow playback, previous / next track are all available. No repeat nor direct track selection is available.
- ◆ When PBC is activated, if random playback, scan playback, search playback is selected, PBC automatically deactivated.

21. Playback Information

During DVD & VCD playback

- 1) Press [DISP] key on the remote control, the playback info of the media is displayed on the screen such as media playing, current time of playback, the following info is displayed at the bottom of the screen:



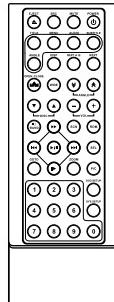
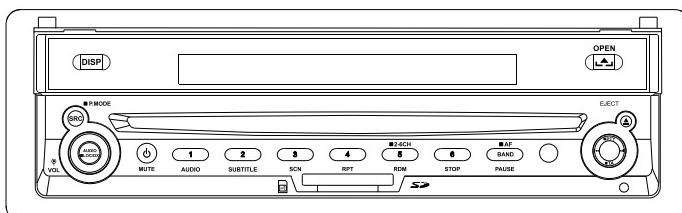
●DVD Information

DVD T : 5/8 C : 2/16 00:41:28 2/6 Eng

- ◆ T - - Title, "5 / 8" indicates that this DVD has 8 titles and the title playing back now is the fifth title.
- ◆ C - - Chapter, "2 / 16" indicates that current title has 16 chapters and the chapter playing back now is the second chapter.
- ◆ "00 : 41 : 28" indicates the current playback time of the current title
- ◆ "2 / 6 Eng" indicates that the subtitle of this DVD has been recorded in 6 languages and the language displayed now is the second, which is English.

Note :

- ◆ For more details about Title & Chapter, please refer to "The Structure of DVD Disc" and "The Structure of VCD/CD Disc"



- During DVD playback, the playback status will be shown as following:

Front: DVD Rear: CDC Dolby Digital By Pass

- ◆ Front: DVD — Current playing source for front zone is DVD
- ◆ Rear: CDC — Current playing source for rear zone is CD Changer
- ◆ Dolby Digital: Current playback audio encoding system
- ◆ By Pass: No pro logic is being used

- During VCD playback, the playback status will be shown as following:

VCD2.0 T: 6 / 18 00 : 02 : 18

- ◆ VCD2.0 -- Disc format
- ◆ T: 6/18 -- indicates that this VCD has 18 tracks and the track playing back now is the sixth title.
- ◆ 00 : 02 : 18 -- indicates the current playback time of the current track.

- During VCD playback, the information displayed for 6-channel playback is shown as below :

Front: DVD Rear: CDC MPEG PLII Music

- ◆ Front: DVD — Current playing source for front zone is DVD
- ◆ Rear: CDC — Current playing source for rear zone is CD Changer
- ◆ MPEG: The decoding method applied
- ◆ PLII Music: Pro Logic II Music is applied.

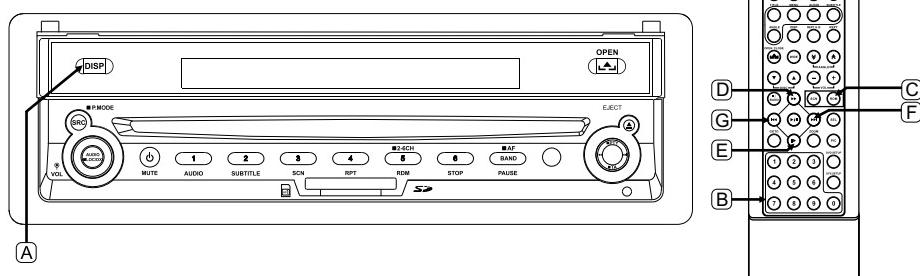
Note: ◆ for 6-channel setup, please refer to "Alter between 2-Ch. & 6-Ch."

- During VCD playback, the information displayed for DownMix playback is shown as below:

Front: DVD Rear: CDC EQ: USER Loud: OFF

- ◆ Front: DVD — Current playing source for front zone is DVD
- ◆ Rear: CDC — Current playing source for rear zone is CD Changer
- ◆ EQ :USER — Current EQ is set to "USER"
- ◆ Loud: OFF — Current Loud level is set to "OFF"

Note : ◆ 2-channel setup, please refer to <Alter between 2-Ch. & 6-Ch> . For details on loudness, please refer to <Audio Control> .



- 2). Press [DISP] key on front panel , "Playback Time → Clock → Disc Format → Playback Time" is sequentially displayed on the LCD screen.



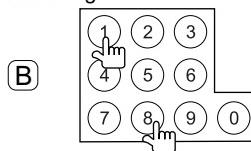
22. MP3 / WMA Playback

When playing back a disc with MP3 / WMA files, it will take the sequence of "Root directory" → "Folder" → "File" to playback a file. each file contains one song or one picture usually. Please refer to <Note On Playback MP3>.

- 1) file search

During the current playback of \square file ④, enter file searching.

Key Pressed	Current File : \square File ④
\blacktriangleleft Key	\square File ④ → \square File ③
\triangleright Key	\square File ④ → \square File ⑤
Key [1][8]	\square File ④ → \square File ⑧



- 2) Select play mode

Pressing [RDM] or [SCN] key on the remote control, the play mode will change as following table:



Play mode	Playback details
Normal	Playback all files in a disc and stop in the end
Repeat Single	Repeat playback one specific file
Folder Repeat	Repeat playback all the files in a directory
Shuffle	Randomly playback all the files in a folder and stop in the end

- 3) Play back files in other folders

Change the folder

- ① Press [\triangleright]、[\blacktriangleright] key on the remote control to change the folder.



- ② Select a file

Press [\triangleright]、[\blacktriangleleft] key on the remote control or numeric keys to select the file you want.



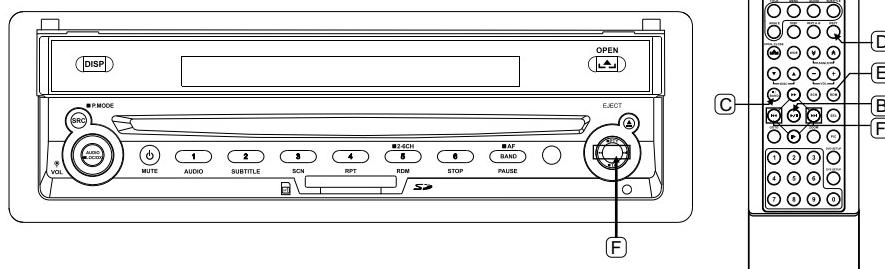


SD CARD

User Interface



- 1 ◊ "1/40" - current track /total track
◊ "00 : 00 : 27" - current track playback time
- 2 ◊ "01:08" - Clock
- 3 ◊ "Repeat" - single track repeat playback,it is key of the touch screen
◊ "Random" - Random playback track,it is key of the touch screen
- 4 ◊ Playback folder display
- 5 ◊ Name of the song display
- 6 ◊ Display some information on playing file
- 7 ◊ Keys of the the touch screen:
"▶/I" - Pause playback
"■" - Stop playback
"PAGE-" - Previous page file menu
"PAGE+" - Next page file menu
"DIR-" - Previous directory
"DIR+" - Next directory

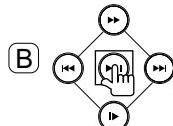


1. Switch To SD Card Source

Select item [SD CARD] in MAIN MENU to enter SD card source mode.

2. Pause Playback

Press [▶■] key on the touch screen or remote control, or press uprightly the joystick.



3. Stop Playback

Press [■] key on the touch screen or [■/BAND] key on the remote control.



4. Repeat Playback

Press [Repeat] key on the touch screen or [REPT] key on the remote control.



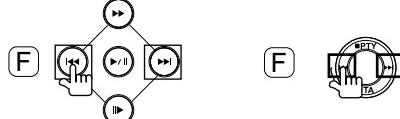
5. Shuffle Playback

Press [Shuffle] key on the touch screen or [RDM] key on the remote control.



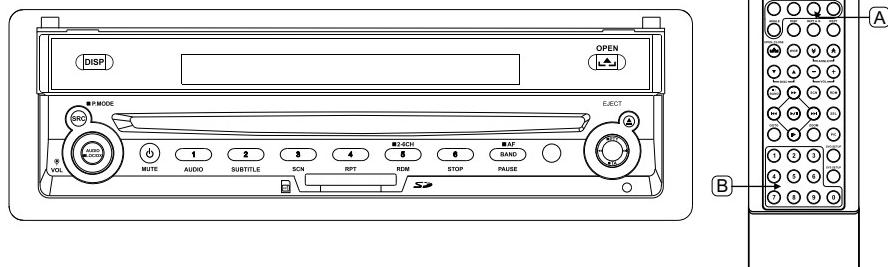
6. Playback Previous/Next Chapter

Press [◀◀]/[▶▶] key on the remote control or [◀◀]/[▶▶] key of the joystick.





SD CARD



7. Switch The Direction

Press [DIR+ /[DIR-]] key on the touch screen to switch previous/next direction.

8. Previous/Next Page

Press [PAGE+ /[PAGE-]] key on the touch screen to switch previous/next page.

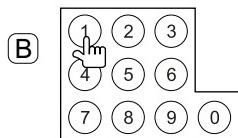
9. Audio Track Selection

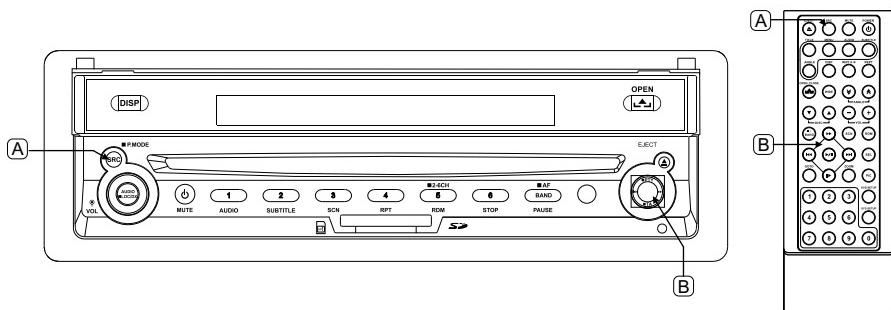
Press [AUDIO] key on the remote control to alter audio.



10. Direct Chapter / Track Selection

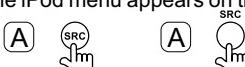
You can use the numeric keypad on the remote control to access a track directly. By pressing the song name showed on the touch screen directly, you can also access a track.





1. Accessing iPod Mode

The unit will automatically switch to iPod mode when an iPod is connected with the unit. To return to the iPod menu from any other source menu, press the [SRC] button on the front panel or remote control until the iPod menu appears on the screen.



2. Controlling Your iPod

The following remote control buttons are used to access the iPod menus:

TITLE = Music

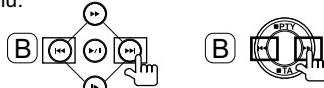
MENU = Photos

AUDIO = Videos

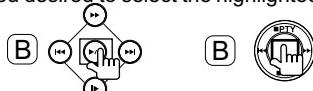
Use the joystick on the unit or the directional keys on the remote control to navigate the iPod menus.

3. Music Playback

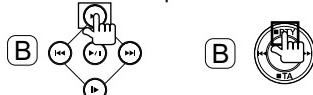
Pressing the [\blacktriangleleft] or [\triangleright] button on remote control or the joystick to move to the next or previous item on the menu.



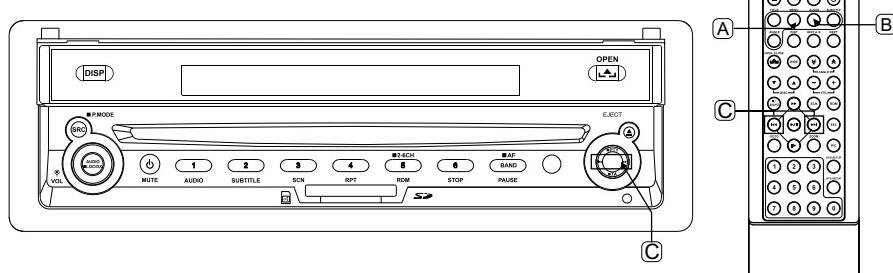
Pressing the [\triangleright/I] button on the remote control or the joystick [ENTER] button on the head unit or touching the option you desired to select the highlighted menu option.



Pressing the [\triangleright] button on the remote control or the [\square] button on the joystick or touching the [MENU] key on the screen to return to the previous menu.



Note: • In the Music mode, the buttons on the iPod are disabled.



4. Photo Playback

While iPod photos can be viewed on the TFT screen, you must use the iPod to control photo playback options.

Press the [MENU] button on the remote control or the [Photos] key on the screen to access the iPod PHOTO mode. The unit will release control back to the iPod so you can select pictures to be displayed on the TFT monitor.



To exit PHOTO mode, press the [MENU] button on the iPod.

Note: •Pictures can be displayed on the screen just when the picture playback mode of iPod is "slide show".

5. Video Playback

While iPod video can be viewed on the TFT screen, you must use the iPod to control video playback options.

Press the [AUDIO] button on the remote control or [Videos] key on the screen to access the iPod VIDEO mode. The unit will release control back to the iPod so you can select video media to be displayed on the TFT monitor.

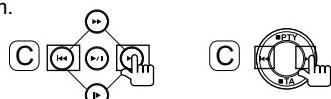


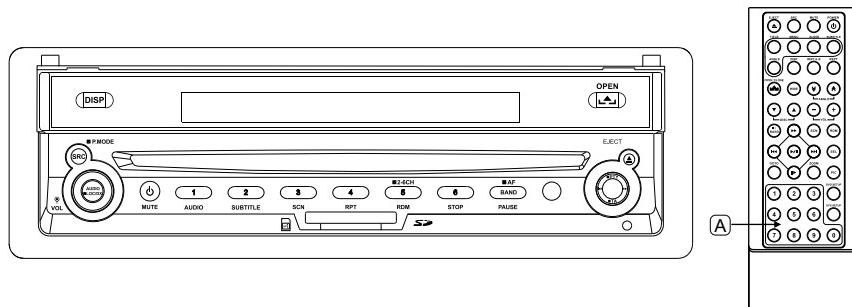
To exit VIDEO mode, press the [MENU] button on the iPod.

Note: •To transmit the images (including videos and pictures) from your iPod to the TFT screen, you must set the following options through the iPod video settings menu: TV Out = On, TV Signal = NTSC, and Widescreen = On.

6. Fast Forward/Fast Reverse

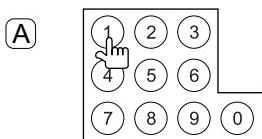
Pressing and holding the [\blacktriangleleft] or [\triangleright] buttons on the front panel or the remote control and the screen for 1 second and continuing to hold for fast forward or fast reverse. To resume normal play, release them.





7. Search Playlist/Artist/Album/Song

To search through Playlists, Artists, Albums and Songs, press the numeric buttons on the remote control while in one of the following directories: Playlist, Artist, Album or Song. The selected directory will be accessed with the number of pages and files in that directory displayed at the top of the page. To access the page or file, enter the page or file number directly from the remote control keypad. Press the [◀] and [▶] button on the remote control or the joystick to select the desired song or track. And you can playback the song or track by touching the file name directly.





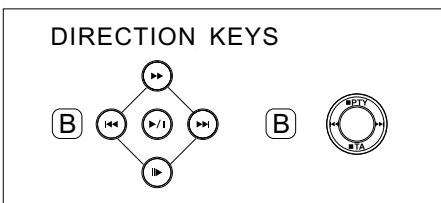
SYSTEM SETUP

System setup is available for adjustment in TUNER, DVD/CD, AUX IN, SD CARD mode. For system settings, press [MENU/SRC] key on the panel to get "MAIN MENU" menu ,and then enter "SYSTEM SETUP" item.

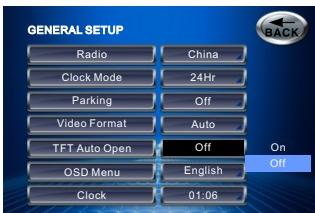


1. General Setup Menu

Accessing the General Setup Menu



To access the "GENERAL SETUP" menu, press the direction key on the joystick or remote control to highlight "GENERAL SETUP" in green. Press the [$\blacktriangleright/\parallel$] key on the remote control ,or press upright the joystick to enter the "GENERAL SETUP"menu.A menu appears with the option for the first item, "Radio",highlight in blue.



1) Selecting a Feature for Adjustment

Press the [$\blacktriangleright/\parallel$][$\blacktriangleright/\parallel$] key on the remote control or the [\blacksquare PTY][\blacksquare TA] key on the joystick to select the feature to be adjusted.

2) Adjust a Feature

- ①. Enter the option field for the feature you want to adjust by pressing the [$\blacktriangleright/\parallel$] on the remote control or by pressing upright the joystick .A submenu appears in a second row with the selected option highlight in light blue.
- ②. Select a new value by pressing the [\blacktriangleright]or[\blacktriangleleft] key on the remote control or the [\blacksquare PTY] or [\blacksquare TA] key on the joystick.
- ③. Confirm your selection by pressing the [\blacktriangleleft],[\blacktriangleright],or [$\blacktriangleright/\parallel$] key on the remote control,or the [\blacktriangleleft][$\blacktriangleright/\parallel$]key on the joystick.The new value is highlighted in light blue and setup is complete.

2. ASP CONFIG

In System Setup Mode, select "ASP CONFIG". In ASP (Audio Sound Processing) CONFIG mode, you can make five adjustments for audio.



1) Bass Center Frequency

According to the audio source of disc, select the Bass center frequency to achieve the best Bass effect. 60Hz, 80Hz, 100Hz, 130Hz, 150Hz, 200 Hz is available for selection.



2) Treble Center Frequency

According to the audio source of disc, select the Treble center frequency to achieve the best Treble effect. 10KHz, 12.5KHz, 15KHz, 17KHz is available for selection.



3) SUB.W Filter (Subwoofer Low Pass Filter)

Selecting a crossover frequency is to set a cut-off frequency of the subwoofer's L.P.F (low, pass, filt) and that of the "SMALL" speakers' H.P.F(high-pass-filter). Crossover frequency setting has no effect if the subwoofer is set "OFF" and any other speaker set "LARGE". Please refer to <6-Channel Speaker Settings>. 80Hz, 120Hz, 160Hz is available for selection.



▶ SYSTEM SETUP

4) . SUB.W Phase (Phase Selection for Subwoofer)

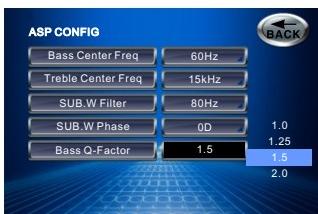
If trying to boost the BASS output of the subwoofer doesn't do much or rather makes you feel that BASS gets further murky, this may indicate that the subwoofer's output and BASS content you hear over other speakers cancel each other out. To remove this problem, try changing the phase setting for subwoofer.

Display	Phase Setup
0D	Subwoofer Output In Phase
180D	Subwoofer Output Off Phase



5) . Bass Q-Factor

Once the Bass Center Frequency was selected and adjusting the Q - factor alters the sharpness of the Bass output, the larger the Q-Factor, the sharper the Bass. Selectable Bass Q-factor was 1.0, 1.25, 1.5, 2.0



3. General Setup



1). Radio

USA1, USA2, Arabia, China, S-America, Europe According to your country, please select a correct radio system.



2). Clock Mode

Display	Clock Mode
12Hr	12 hour
24Hr	24 hour

Note: For details to setup clock,please refer to <Clock Adjustment>.



3). Parking

Display	setup
On	Image displayed only when the car is parking
Off	Image displayed anytime



Note: Please refer to <When Parking Brake applied>

▶ SYSTEM SETUP

4). Video Format

Adjust according to the video system of the attached TV.

Display	Setting
Auto	The color signal output is switched automatically according to the recording system of the current disc.
NTSC	The color signals are output in the standard NTSC system.
PAL	The color signals are output in the standard PAL system.



5) . TFT Auto Open

Display	Setup
On	Once the unit is power on, the monitor automatically switch on
Off	Once the unit is power on, the monitor switch on only by pressing power on key



Note: • Please refer to <TFT Monitor Auto Open>.

6). OSD(operation system display) Language

Display	Setup
ENGLISH	Menu Display in English



7) . Clock Adjustment :

Method 1: Touch "+" or "-" key on the screen to adjust the value of clock.

Method 2: Press [▲]/[▼] key on the joystick to move the cursor to "Hour" or "Min" option.
Press [◀]/[▶] key to adjust the value of Hour or Min.



Note: • All the settings above are set until [RESET] button is pressed (please refer to "Load factory-Restore Factory Default")

4 . RDS Setup



1). RDS

Display	Setup
On	Activate RDS function
Off	Deactivate RDS function



2). CT

Display	Setup
On	Clock is automatically adjusted by RDS station
Off	Clock can't be automatically adjusted



3). Region

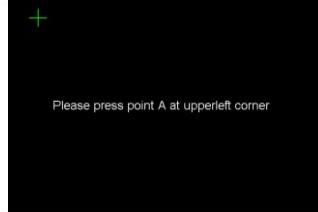
Display	setup
On	automatically switch to RDS station with the same PI
Off	automatically switch to a good station



5. CAL Screen

When the touch operation is not sensitive or valid, you should calibrate the touch screen through "CAL Screen" function.

Calibrate the touch screen just following the clew displayed on the screen after entering the "CAL Screen" mode.



DVD SETUP

Only in DVD player source, LANGUAGE, AUDIO, VIDEO, SPEAKER, RATING(Parental lock), and Pro Logic II are available for setup. These operations can be done through remote control or joystick. Once the DVD function set , the DVD system will be memorized . If you want to resume the Factory Default,please refer to "Load factory-Restore Factory Default ".



1. LANGUAGE

Press [DVD SETUP] key on the remote control to enter < DVD SETUP> mode,then select "LANGUAGE". For details setup procedure ,please refer to the method of System Setup .



1) Subtitle



- Note:**
- ♦ If a DVD supports more than 1 subtitle language, all the subtitle languages are available for selection during playback.
 - ♦ If the selected subtitle language was not supported by the DVD, then the default subtitle language is used.
 - ♦ During playback, press [SUBTITLE] key to alter subtitle language directly.
 - ♦ By using[SUBTITLE]key to alter the subtitle language does not alter the correlated setup.

2) Audio



- Note:**
- ♦ If a DVD supports more than 1 audio language , all the audio languages are available for selection during playback.
 - ♦ If the selected audio language was not supported by the DVD, then the default audio language is used.
During playback, press [AUDIO] key on remote control to alter audio language directly.
 - ♦ By using [AUDIO] key to alter the audio language does not alter the correlated setup.

3) DVD Menu



- Note:**
- ♦ Once the menu language is selected , it will be displayed automatically when alters to MENU/TITLE.
 - ♦ If the selected menu language was not supported by the DVD, then the default language is used.

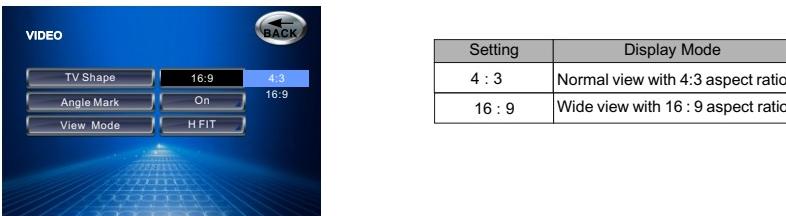
2. VIDEO Settings

Press [DVD SETUP] key ,then select "VIDEO". For details setup procedure, please refer to the method of System Setup.



1) TV shape

To setup the width / height ratio of the image displayed. Two common aspect ratios are wide screen (16:9) & normal display (4:3).



Note:

- For normal display, please select 4 : 3 , select 16 : 9 may result in image distortion.
- This function is not available for some discs. For more details, please refer to the disc.

2) Angle Mark

If multi angle is recorded on a disc, an indicator is displayed on the bottom right corner of the screen.



Display	Setting
On	Angle indicator is shown
Off	No Angle indicator

Note: • Press [Angle] key on the remote control to change the angle of playback, for details, please refer to <Angle Selection> .

3) View Mode



Display	Setting
FILL	Image display mode is FILL
Original	Image display mode is Original
H FIT	Image display mode is H FIT
W FIT	Image display mode is W FIT
Fit to Screen	Image display mode is Fit to Screen
Pan & Scan	Image display mode is Pan & Scan

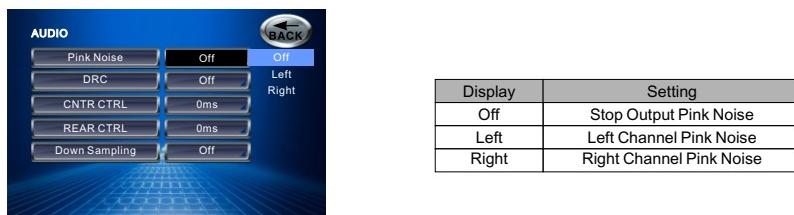
3. AUDIO Settings

Press [DVD SETUP] key ,then select "AUDIO". For details setup procedure, please refer to the method of System Setup.



1) Pink Noise

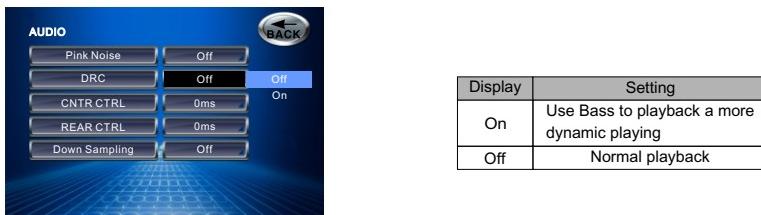
Use the built in pink noise to adjust each channel output volume,or verify if audio output quality is normal by adjusting the output volume at the listening position.



Note: • adjust the volume for each speaker, please refer to "Alter between 2 Ch. & 6 Ch." .

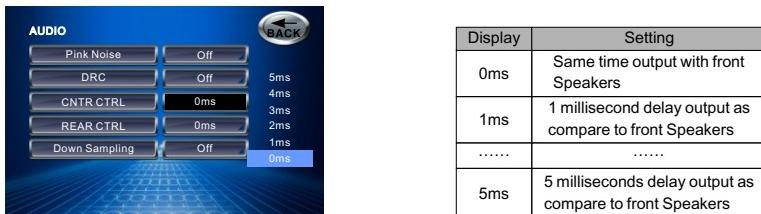
2) DRC--Dynamic Range Control

Employ the dynamic range control for better playback for low volume playback.



3) CNTR CTRL--Center Speaker Delay

The time difference between center Speaker and front Speakers, a proper adjustment to the time delay produces a more accurate audio effect for listening.



Note: • CNTR CTRL is available for adjustment only when center speaker is setted as small or large ,please refer to SURROUND SETUP.

4) REAR CTRL--Rear Speakers Delay

Setup rear speaker output delay as compare to front Speaker output,setup this function results in a better surround sound effect.



Display	Setting
0ms	Same time output with front Speakers
3ms	3 milliseconds delay output as compare to front Speakers
.....
15ms	15 milliseconds delay output as compare to front Speakers

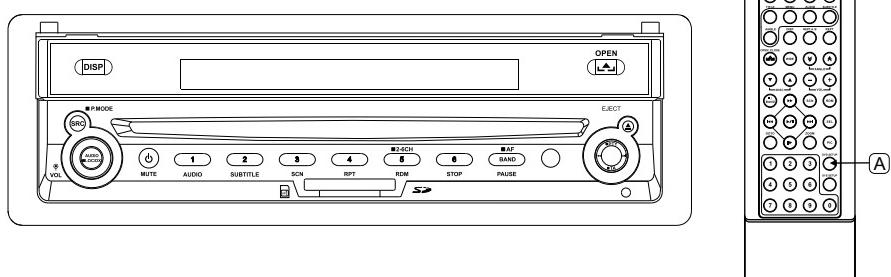
Note: • REAR CTRL is available for adjustment only when center speaker is setted as small or large , please refer to SURROUND SETUP.

5) Down Sampling



Display	Setting
On	audio signal output at 48kHz
Off	Normal Output

Note: • No matter what the sampling frequency is , if the above selection is on , all the signal output is 48kHz , even a 96kHz signal becomes 48kHz.
 • Non-audio output may be resulted by improper setup, please refer to "Electrical Connections Overall Diagram".



4. SURROUND SETUP

Press [DVD SETUP] key on remote control, then select "SURROUND SETUP" mode .



1) 6-Channel Speaker Settings

Move the cursor to "FULL 6CH", press [►||] key to enter setup.

① FL/FR- Set up for front speakers



Display	Setting
Large	suitable for speaker with good bass output
Small	Suitable for speaker with no good bass output

② RL/RR- Set up for rear speakers



Display	Setting
Large	suitable for speaker with good bass output
Small	suitable for speaker with no good bass output
None	Rear speaker is not employed

③ SW- Set up for subwoofer



Display	Setting
Present	Subwoofer is employed
None	Subwoofer is not employed

④ CT- Set up for center speaker



Display	Setting
Large	suitable for center speaker with good bass output
Small	suitable for center speaker with no good bass output
None	Center speaker is not employed

2) DownMix- 2 Channel Speaker Settings

- ① Select "DownMix" to setup composite audio output from 2 channel speaker system.
- ② In multi channel mode and Dolby Pro-Logic was off, during playback PCM,VCD, MP3, audio. output only come from both front speakers.

Note: • Please refer to <Alter between 2 Ch. & 6 Ch.> .

5. SURROUND FX

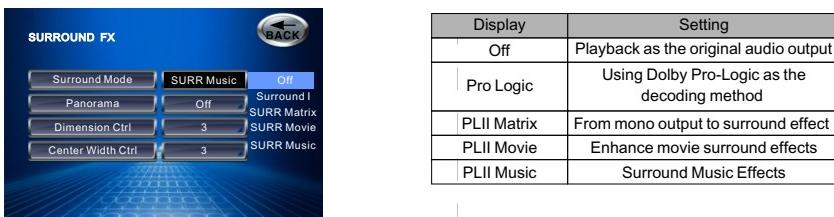
Pro Logic II is a dramatically improved matrix surround system based on the original Dolby Pro Logic system. In the case of Pro Logic, there were four channels front left, center, and front right, plus a mono surround channel that was usually split between two rear Speakers. Compared to Pro Logic, Pro Logic II offers two full-range stereo surround channels, more sophisticated steering logic, high channel separation and an exceptionally stable sound field. DPL II uses a simple servo circuits used to derive the five channels. And, unlike the synthetic Jazz club, Hall and Stadium modes found on many A/V receivers, DPL II introduces no phony delay-induced echoes, reverb, or tonal coloration.

Press [DVD SETUP] key, then select "PRO LOGIC II". For details setup procedure, please refer to the method of System Setup .



1) Surround Mode

With DPLII decode technology, you can have different surround sound effect.

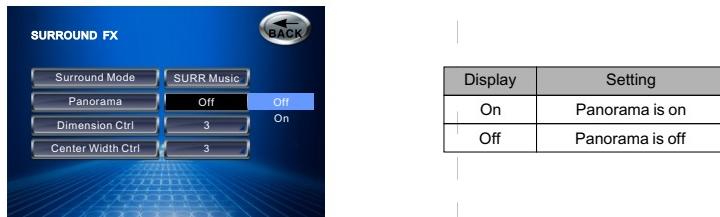


Note:

- If the playback is 2-Channel LPCM or 2-channel Dolby Digital disc, Pro Logic II is suggested to be used.
- To avoid poor audio output quality, please turn off Pro Logic II during playback DVD
- When PLII Music mode is selected, Dimension Control and Center Width are available for fine tuned to achieve a more realistic surround sound reprocessing.

2) Panorama

Extend the audio from the front to the rear to achieve a better audio surrounding effect. Panorama is available for adjustment only when PLII Music mode is activated.



3) Dimension Ctrl

By adjusting the distribution the front & rear audio output to achieve a better balanced audio surrounding effect

Dimension Control is available for adjustment only when PLII Music mode is activated. Press [**[◀]**][**[▶]**] key on the remote control or [**[◀]**][**[▶]**] key of the joystick to adjust the dimension control.



Setting Range	Effect
0 – 6	Audio output shift between front & rear

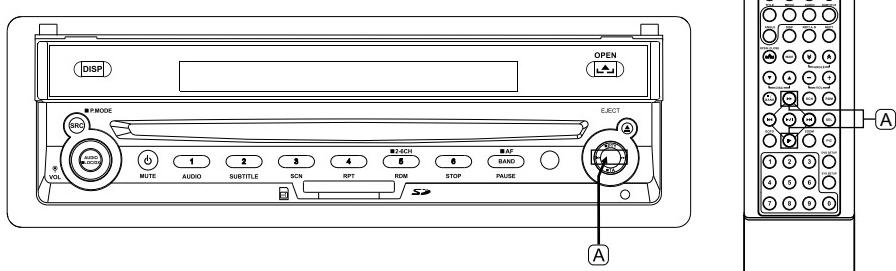
4) Center Width Ctrl

The audio output for central may come directly from center Speaker, or from left & right Speakers-an illusion effect,or from all three Speakers by adjusting the center width. Adjusting the center width provides a better balance of audio surrounding effect.

Center Width is available for adjustment only when PLII Music mode is activated. Press [**[◀]**][**[▶]**] key on the remote control or [**[◀]**][**[▶]**] key of the joystick to adjust the center width.



Setting Range	Effect
0 – 6	Audio Output shift between front speakers & center speaker.



6. RATING

DVD has built in a parental lock feature to prevent unauthorized person to view restricted disc content

1) Setup

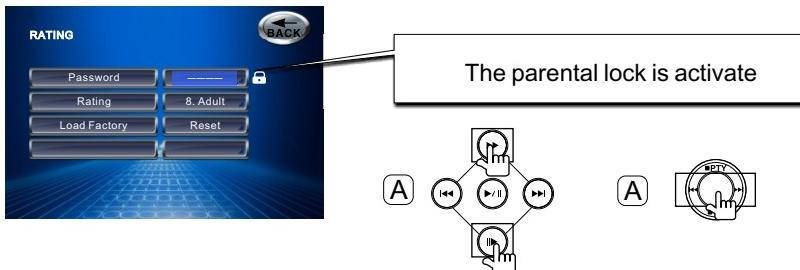
Parental lock is released only by entering the correct password, once the lock is released, the rating is available for setup. The lock is open for the first time to use, please follow step 3 to 7 to setup the parental lock. To set up this lock again, please follow the steps listed below:

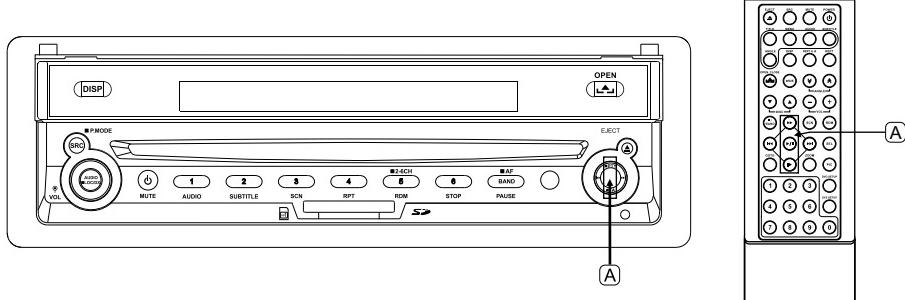
Press [DVD SETUP] key , then select "RATING". For details setup procedure please refer to the method of System Setup .



① Select Password

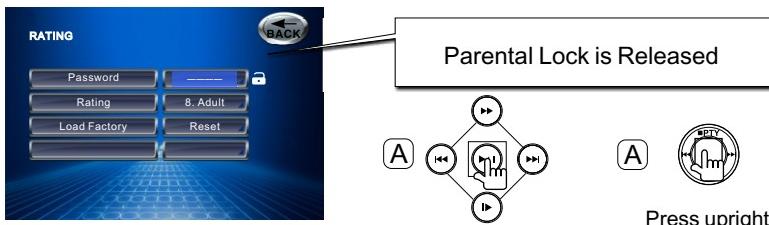
Press[▶▶][◀◀] key on the remote control or [◀◀][▶▶] key of the joystick to move the blue cursor to "Password"





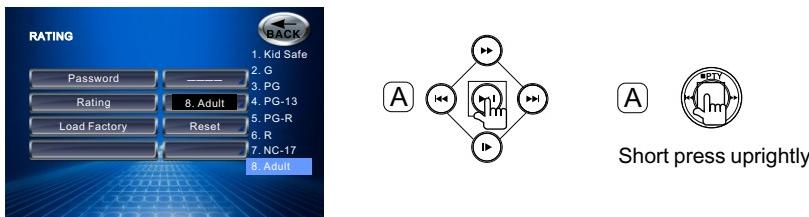
② Enter Password to Unlock the Parental Lock

Key in the correct password (4 digit), then press [▶/II] key on remote control or [ENTER] key of joystick to unlock the parental lock.



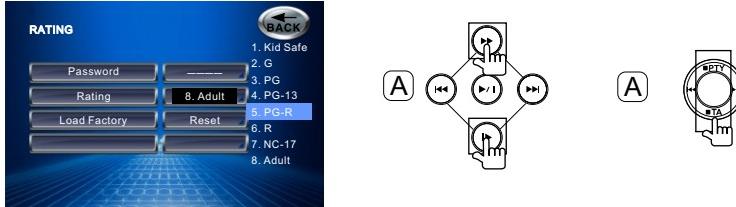
③ Enter Rating Menu

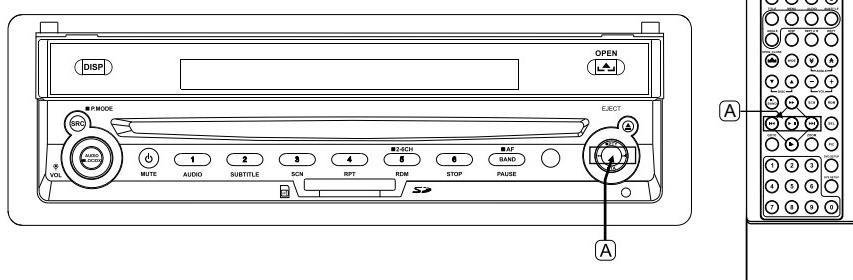
Move the blue cursor to "Rating", press the [▶/II] key on remote control or the [ENTER] key of joystick, the below submenu appears



④ Rating Selection

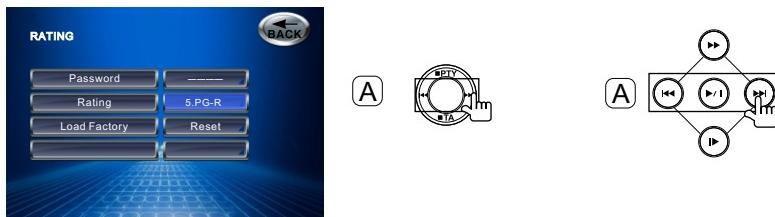
Press [▶/II][▶/II] key of remote control or [■PTY][■TA] key of joystick to move the blue cursor.





⑤ Confirm Setting

Press [▶][◀][▶] key on remote control or [Enter][◀][▶] key of joystick to confirm the rating of parental lock



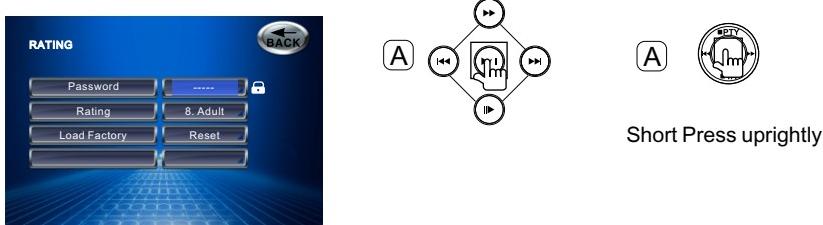
⑥ Apply password to secure the rating

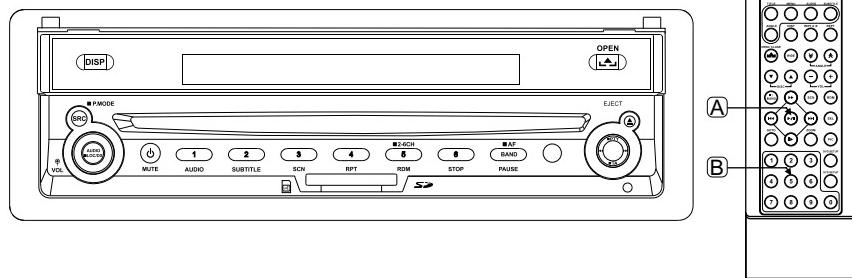
Move the blue cursor to password, press numeric key on remote control to enter password.



⑦ Lock up the rate setting

Press [▶][◀] key or the [ENTER] key of joystick to finish setup the parental lock. The parental lock indicator is locked and the whole process is done.



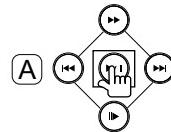
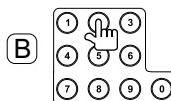


2) Password Changing

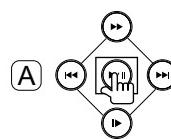
- ① In Rating menu, move the blue cursor to "Password".



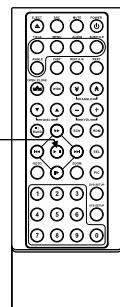
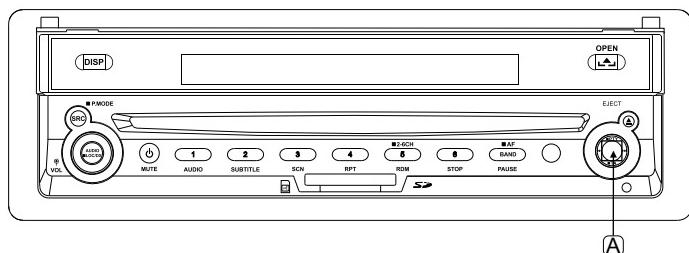
- ② Press numeric key to enter correct password, press [▶/II] key to release the parental lock.



- ③ Enter new password and press [▶/II] key to confirm



- Note :**
- ◆ Record the password and keep it in a safe place for future reference
 - ◆ The rating of the disc are marked on disc, disc packing, and documentation. If the rating of parental lock is not available in disc, no setup of the parental lock is available.
 - ◆ Even some disks are restricted for viewing by parental lock, only portions of the content are restricted instead of the whole. For details, please refer to disc description.
 - ◆ Even reset factory default is executed, the settings of Password and Rating remain unchanged.

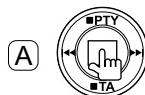
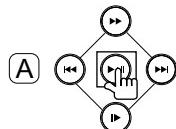


3) Load Factory--Restore Factory Default

① In Rating menu, move the blue cursor to "Reset".

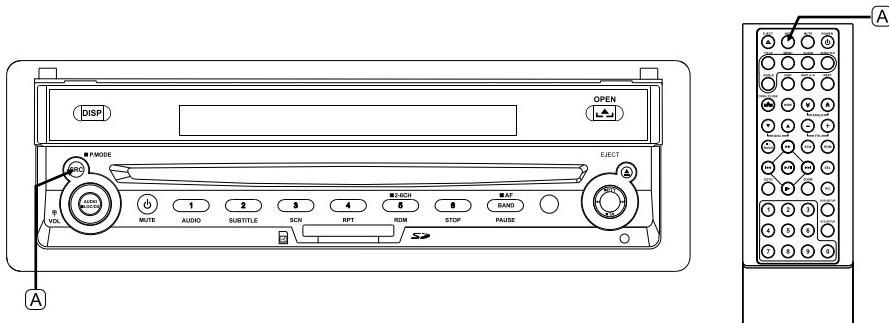


② Press [▶/II] key on remote control or [ENTER] key of joystick to restore factory default setup.



Short Press uprightly

Note: • Even "DVD setup" has been reset to factory default, "Password" and "Rating" remain unchanged.



1. AUX IN

External peripheral could be connected to this unit via RCA output & Aux-in.

1) Select Aux-In Playback Mode

Press [SRC] key to alter the playback mode to AUX IN.



2) Operation for Aux-In

For AUX IN mode details, please refer to <BASIC OPERATION> .

2. Rear View Video Camera

1) This playing mode is available only if the Rear View Video Camera is installed properly.

Reverse driving activates CAMERA playing mode. Connect the video input cable "CAMERA" to the camera output cable for this function. Please refer to < Electrical Connections Overall Diagram > .

2) The playing mode switches to CAMERA mode automatically while reverse driving and return to the previous once the reverse driving is done.

3. RGB Input

This unit can accept RGB video input signal, please refer to the Wiring Illustration.

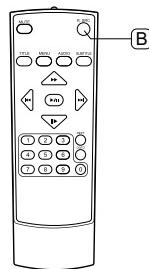
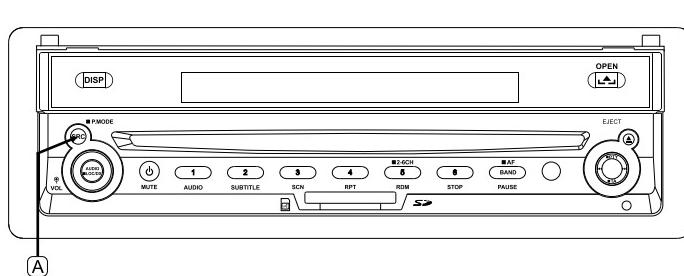
1) Select RGB video input mode

Press the [MENU/SRC] key on the panel, then select "RGB IN" to enter this mode. It can also be accessed through the remote control by pressing [SRC] key until the RGB is selected.

2) If RGB source can output audio (mono) as well, please connect it's audio output to the unit's audio input port. The unit can also automatically mix that audio together with the audio from DVD, Tuner, etc. to make them being played back simultaneously.



▶ OTHER PLAYBACK MODES



Remote Control for Rear Zone

3. Rear Zone

If a monitor is installed in the rear zone and connected to the rear zone AV output, passengers at the back seat is capable to enjoy an live entertainment show provided by this unit through the operation control via the remote control for rear zone.

- 1) Press [R.SRC] key on remote control, rear zone playing mode alter according to:DVD,DVDC, AUX IN, OFF. During the rear zone playing mode alternation, the playing mode is shown on the TFT screen and LCD screen.



Long press [SRC] key on front panel to start rear zone playback(the same playing mode as the front zone except when the front is radio, the rear is DVD)



- 2) Turn Off the Rear Zone Playback

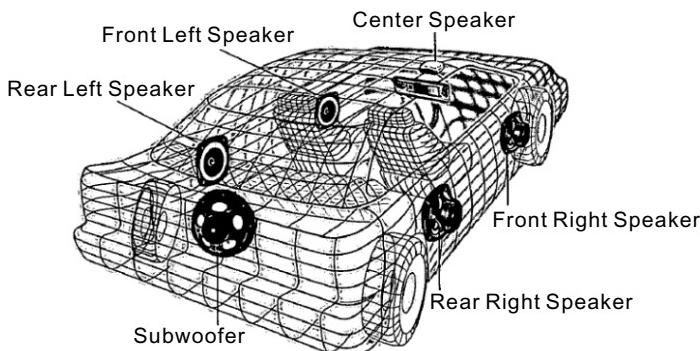
Press [R.SRC] key on remote control or long press [SRC] key on front panel turn off the rear zone playback



1. Dolby Digital 5.1 Surround Sound

Dolby Digital 5.1 is a surround sound system that keeps the multiple channels fully separated throughout the AV encoding and decoding processes. In addition to having Left, Centre, Right, Left Surround, and Right Surround these 5 channels, Dolby Digital 5.1 soundtracks carry a sixth channel or a .1 channel that boosts the audio output with very low frequency for theater like sound effect.

To optimize the output effect of Dolby Digital 5.1 surround sound, the following Speaker allocation is recommended:



2. Useful Information about Disc

1) The structure of DVD Disc

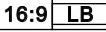
DVD, VCD and CD disc stated in the following table can be played back with this unit, please refer to following table for information.

Disc Symbol	Disc Physical Properties	Maximum Playback Time
	12cm / Single Side Single Layer (DVD-5) Single Side Double Layer(DVD-9)	(MPEG 2 Method) 133 minute 242 minute 266 minute 484 minute
	12cm / Double Side Single Layer(DVD-10) Double Side Double Layer(DVD-18)	(MPEG 1 method) 74 minute
	VCD Disc 12cm / Single Side Single Layer(VCD)	74 minute
	CD Disc 12cm / Single Side Single Layer	

2) The structure of VCD / DVD Disc

The following symbols found on DVD label and packing show the functions and options available in discs.

MISCELLANEOUS

Symbol	Meaning
	Number of voice languages recorded with the audio function. The number in the icon indicates the number of voice languages.(Max. 8 languages.)
	Number of subtitles languages recorded with the subtitle function. The number in the icon indicates the number of subtitle languages.(Max.32 languages.)
	Number of angles provided by the angle function. The number in the icon indicates the number of angles.(Max.9 angles.)
	Aspect ratios that can be selected."LB"stands for Letter Box and"PS"for Pan/Scan.In the example on the left,the 16:9 video can be converted into letter box video.
	Indicates the region code where the disc can be played.

3. Note on Playback Mp3

1). Media compatibility

This player allows you to playback MP3 files recorded on CD-ROM,CD-R and CD-RW.For CD-RW disc format,please make sure it is formatted by full method but not quick method to prevent illegal disc operation.

2). MP3 format compatibility

(1). All the file naming format listed below are compatible, file and folder naming format is listed below in the bracket

- ◆ ISO 9660 Level 1 (file name : 12 characters; file extension : 3 characters)
- ◆ ISO 9660 Level 2 (file name : 31 characters; file extension : 3 characters)
- ◆ Joliet (64 characters)

(2). regarding symbol displayed, please refer to "File & Folder Name Input".

(3). If file name or folder name does not conform to ISO 9660 file system, it may not be displayed correctly nor be normally played back.

3). Settings for MP3 encoder and CD writer

(1). Do the following seting when compressin g audio data in MP3

- ◆ Transfer Bit Rate : 8 - 320kbps ;
- ◆ Sampling Frequency : 16 , 22.05 , 24 , 32 , 44.1 , 48kHz

(2). when recording MP3 up to maximum disc capacity using CD writer, disable additional writing. For recording on an empty disc up to maximum disc capacity, use "Disc at once" setting.

4). File & Folder Name Input

(1). If file name or folder name does not conform to ISO 9660 file system, it may not be displayed correctly nor be normally played back.If a differen CD recorder engaged,it may not be displayed correctly.

(2). Only file with "MP3" as the file extension may be played back.

5). Reading MP3 file from media

(1).Too many folders or files other than MP3 recorded on a disc consumes more time to start a playback of MP3 file. File or folder searching may not be accessible.

(2). Besides,when playback a next MP3 file,it may consumes more time or files and folders searching may not be accessable.

6). Note on playback MP3

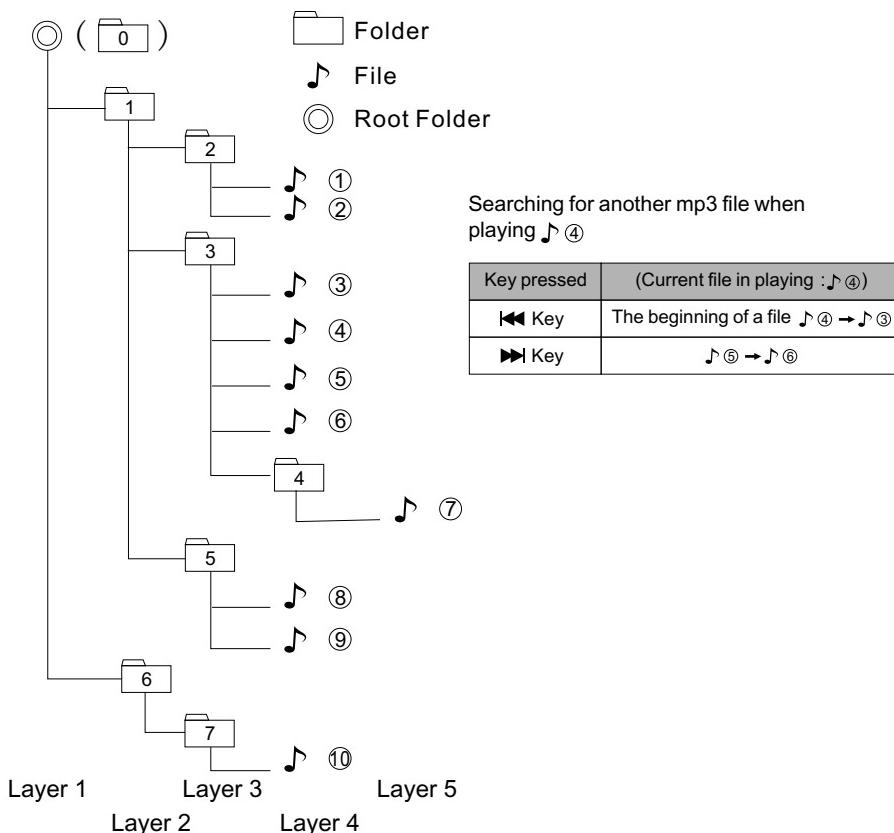
- (1). Never try to rename a non - mp3 file into a file with mp3 name extension. Otherwise, this unit playback this non-mp3 abnormally.
- (2). Never playback non-MP3 files.

7). Note

- 15
- (1). During playback or file searching, playback according to the disc recording sequence.
Sometimes, the predicted playback sequence is not as the actual playback sequence.
 - (2). Playing list function is not supported. Record files and folders in the order you want them to be played or using some software to specify the recording order by adding prefix " 01 " to " 99 " to the file name.
 - (3). file and folder order and file search

For example,a medium with the following folder / file hierarchy is subject to File Search as shown below.

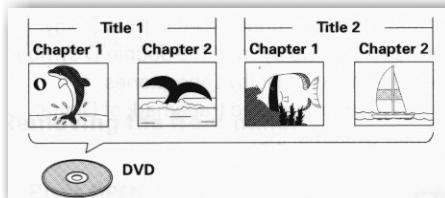
Example of a medium's folder/file hierarchy.



4.The Structure Of DVD Disc

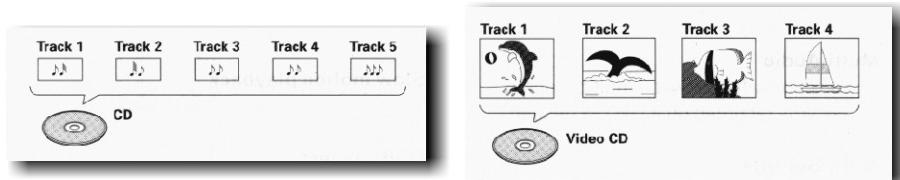
DVD has different titles and the titles subdivide into different chapters.

For AV program, a single work (such as filming information, the theme of the movie) has a single TITLE, For Karaoke disc ,each chapter is a single song. But some of the disc are not recognized as per this method, notice its different when using "search" function.



5.The Structure Of VCD / CD Disc

For VCD,CD,MP3 discs, the discs are divided into tracks and each track carries a song. Index number may be used for each tracks to distinguish each other in some certain discs.



6.Glossary

1) Dolby AC-3 (Dolby Digital)

A true surround sound system that offers up to 6 discrete channels: 2 front(left & right), 2 rear (surround left & surround right), 1 center, and 1 subwoofer. These Channels are often specified as 5.1 as subwoofer only count as " 0.1 " channel. The channels are compressed using lossy audio compression algorithm and then packed into a bitstream.

2) Line PCM (LPCM)

Line PCM (Pulse Code Modulation) is an uncompressed audio format that is similar to CD audio, but with higher sampling frequencies and quantizations. LPCM offers up to 8 channels of 48 kHz or 96 kHz sampling frequency and 16 , 20 or 24 bits per sample but not all at the same time . LPCM provides better audio quality as compare to CD audio using 44. 1kHz and 16 bits. LPCM offers high quality (similar to DVD-Audio) but its high data rate leaves little bandwidth for video on a DVD video disc. The audio signal is converted to digital data and recorded in two channels without any compression. Due to the larger capacity DVD is as compare to CD's, more data with better accuracy could be stored implies better quality audio DVD may have over CD's.

3) HDCD

High Definition Compatible Digital(HDCD)is a patented encode/decode process for delivering the full richness and detail of the original microphone feed on Compact Discs and DVD - Audio. HDCD-encoded CDs sound better because they are encoded with 20 bits of real musical information,as compared with 16 bits for all other Cds. HDCD overcomes the limitation of the 16-bit CD format by using a sophisticated system to encode the additional 4 bits onto the CD while remaining completely compatible with the existing CD format. HDCD provides more dynamic range, a more focused 3-D soundstage, and extremely natural vocal and musical timbre. With HDCD, you get the body, depth, and emotion of the original performance not a flat, digital imitation.

4) Pro Logic II

Pro Logic II is a dramatically improved matrix surround system based on the original Dolby Pro Logic system, In the case of Pro Logic, there were four channels front left, center, and front right, plus a mono surround channel that was usually split between two rear Speakers. Compared to Pro Logic, Pro Logic II offers two full-range stereo surround channels, more sophisticated steering logic, high channel separation and an exceptionally stable sound field. DPL II uses a simple servo circuits used to derive the five channels. And, unlike the synthetic, Jazz club, Hall and Stadium modes found on many A/V receivers, DPL II introduces no phony delay-induced echoes, reverb, or tonal coloration.

5) Multi Angle Playback

DVD may contain scenes that have been shot simultaneously from different angles,a scene then could be selected for viewing from different angles during its playback.

6) Region Code

Region 1: USA, Canada, East Pacific Ocean Islands ;

Region 2: Japan. West Europe. North Europe. Egypt. South Africa. Middle East ;

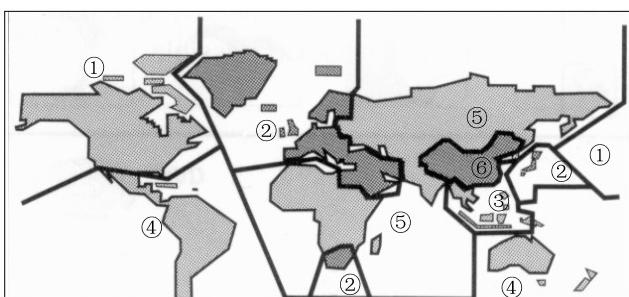
Region 3: Taiwan. Hong Kong. South Korea. Thailand. Indonesia, South East Asia ;

Region 4: Australia, New Zealand,Mid, south America,South Pacific Ocean Islands/Oceania

Region 5: Russia. Mongolia. India. Middle Asia. East Europe. North Korea. North Africa.

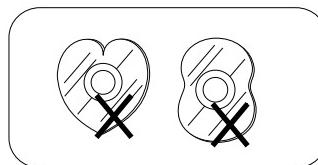
North West Asia

Region 6: Main Land China.



7. Caution Of Disc Using

- 1) Avoid using irregular shaped disc

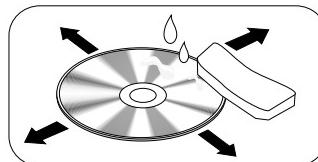


1

15

- 2) Disc cleaning

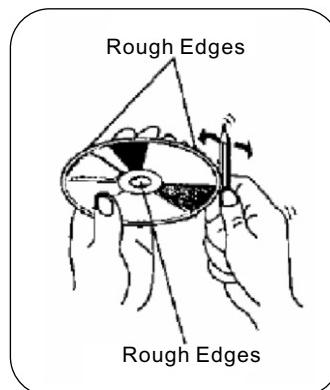
Use a dry, soft cloth to wipe the disc from center outward, only neutral detergent may be used.



2

- 3) Preparation for new disc using

Edges of new disc are rough, using pencil edge to clean up those rough spots are recommended.



3

TROUBLESHOOTING

When problem occurs, please refer to this guide for solution. If the problem is not mentioned here or the problem still exists, please consult a professional car audio shop.

General

Symptom	Cause	Remedy
The unit is not able to be Power On.	Broken Fuse.	Install a new fuse with correct rating.
	Fuse of car battery broken.	Install a new fuse with correct rating. Check the connection.
	Illegal operation or other factor that causes the MCU illegal operation.	Use a pin to press the RESET key located in the right corner of front panel. Regarding restart the unit after reset factory default, please refer to "System Reset".
remote control doesn't work.	Battery is running out.	Replace the empty battery with new ones. For more details, please refer to "remote control".
	Battery are inserted in improper direction.	Insert battery in correct direction.
No / Low audio output.	Improper Audio Output Connection.	Refer to [Equipment connection] of this manual.
	Too low volume adjustment.	Increase volume adjustment.
	"Improper MUTE connection.	Check the MUTE connection. If a phone is not installed, please leave the MUTE cable open. Please refer to <Electrical Connections Overall Diagram> .
	Damaged Speakers.	Replace with good Speakers.
	Heavily biased volume balance.	Adjust the channel balance (Fader / Balance) to the center position. please refer to <audio control> .
	For some disc, 96KHz Output is not allowed to be used.	Change the output to 48KHz (please refer to <LPCM 48K DS>).
Poor Sound quality or Sound distortion.	Wiring of Speaker is in connect with car.	Use insulating tape for wiring connections.
	Piracy disc is used.	Use original copy.
	Speaker power rating does not fit into this unit output power.	Connect to Speakers with appropriate power rating.
	Shared Speaker connections.	Independent Speaker connections.
Tel-mute malfunction.	Speaker is shorted.	Check Speaker contact.
	MUTE is grounded.	Make sure MUTE connections are not grounded and are properly insulated. Please refer to < Electrical Connections Overall Diagram> .
The unit reset factory default itself when the engine is off.	Incorrect connection between ACC and positive wire of battery.	Connect the ACC and B+ leads according to <Electrical Connections Overall Diagram> .

TFT Monitor

Symptom	Cause	Remedy
Monitor cannot be automatically open.	TFT Auto Open was off.	Set TFT Auto Open to on. For details, please refer to "TFT Auto Open".
No image.	Wrong connection to parking brake cord.	Connect the parking cable according to <Electrical Connections Overall Diagram> .
	PRK SW is activated and the parking brake is not engaged.	Stop the car in a safe place, engage the parking brake to resume display, please refer to "When Parking Brake Engaged".
Flashing image and image interference appears on screen.	The TV system of DVD playing and the TV system setting of this unit is not consistent.	Setup according to the Video system of the disc, please refer to "TV system".
	Wrong video system description of DVD.	Setup to the unselected Video system, please refer to "TV system".
	Improper / Damaged video signal connections.	Check all video signal connections thoroughly, and connect all the cables according to <Electrical Connections Overall Diagram> .
Prolonged image, Invalid Height / Width Ratio display.	Improper aspect ratio setup.	Use correct aspect ratio for viewing, please refer to "Aspect Ratio".
ATTENTION is displayed continuously on the monitor screen.	Parking Enable is activated.	Deactivate Parking Enable by select this option to OFF. For details, please refer to "When Parking Brake Engaged".
Monitor Image illegal display.	Illegal operation.	Restart this unit.
Monitor stop at improper position.	Moving Path is blocked.	Press key to loading in/out the monitor again to resume normal mechanical movement. Please refer to "Monitor Movement Mechanism".

Radio Tuner

Symptom	Cause	Remedy
Too weak radio station searching.	Auto antenna is not fully extended.	Connect the Auto antenna control cable properly.
	Improper connection of auto antenna.	Connect the Auto antenna control cable properly.
	LOCAL function is activated.	Switch off LOC function.

TROUBLESHOOTING

DVD Player

Symptom	Cause	Remedy
Disc cannot be inserted. Disc cannot be playback.	Disc is stationed inside the unit.	Eject the disc and insert again.
	Disc is scratched / damaged.	Use disc with good condition.
	Disc is too dirty / wet.	Clean disc using a soft cloth.
	Laser pickup is dirty.	Clean laser pickup by cleaning disc.
	Incompatible disc is used.	Use compatible disc.
	Disc rating exceeds the parental lock rating limit.	Select the rating of parental lock to proper setting.
	Disc is inserted upside down.	Insert the disc in proper face.
	The region code of the disc is not compatible with this unit.	Use only disc with region code the same as of this unit.
No Display Message.	Display message is not available in the disc.	The disc do not have any display message. Please refer to <Playback Information> .
No audio / subtitle alternation is available.	Only 1 audio / subtitle is available in disc.	Only available to multi language/subtitle disc.
No angle alternation is available.	No alternative angle is available for the current scene of the content.	Alternative angle is not available with the disc, only can playback with single angle.
	Only 1 angle was recorded in the disc.	Select the alternative angle disc to playback.
Image blurred, distorted, dark.	Disc is copyright protected.	Use original disc copy.
PBC can't be used in VCD playback.	No PBC is available in that VCD.	PBC operation can not be perform in case the VCD do not has this function. Please refer to <PBC Function> .
No repeat, searching in VCD playing.	PBC is on.	Turn off PBC. please refer to <PBC Function> .

MP3

Symptom	Cause	Remedy
MP3 can't be played back.	Disc is scratched / too dirty.	Clean the disc.
Interruption occurred during playback.	Disc is too dirty or scratched.	Clean the disc.
	file is damaged.	Use file in good condition for playback.
	Bad recording.	Record again or use file in good condition. please .
Incorrect playback time displayed.	Depends on the recording.	
Incorrect playback message displayed.	Message is longer than the LCD display allowed.	

**Miscellaneous Info**

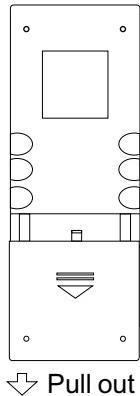
Message Displayed	Cause	Remedy
Loading	Disc is being read.	
No Disc	Disc is very dirty	Clean disc
	Disc is upside down	Place disc where disc symbol face upward
	No disc inside the loading compartment	Insert Disc
Bad Disc	Disc is very dirty	Clean disc
	Disc is upside down	Place disc where disc symbol face upward
Unkown Disc	Disc format is not compatible with this unit.	
Region Error	The DVD is not compatible to the region code of this unit	
Error	Illegal mechanical operation.	Press the [RESET] Key on the front panel to restore the unit.

1. Note

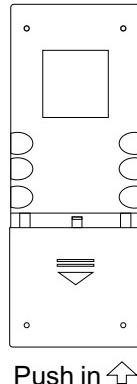
- ◆ Use "button shaped" lithium battery "CR2025" (3V) only .
- ◆ Do not recharge, disassemble, heat or expose the battery in fire.
- ◆ Remove the battery from the remote control or insert a battery insulator if the battery has not been used for a month or longer
- ◆ Do not store the remote control under direct sunlight or in high temperature environment, the controller may not function properly.
- ◆ Insert the battery in proper direction according to the (+) and (-) poles.

2. Uninstall Battery

Slide out the battery compartment tray at the bottom on the back of the remote control.

**3. Install Battery**

Use only "button shaped" lithium battery "CR2025" (3V), insert the battery to the battery tray in proper direction according to the (+) and (-) poles.

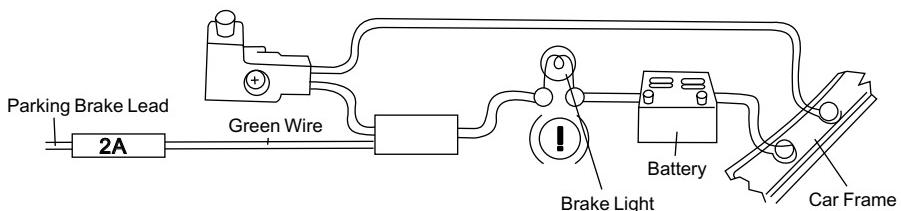


Note

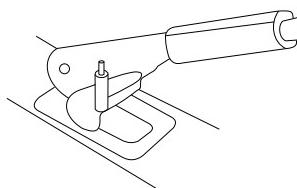
- This unit is designed to be used in a vehicle with a 12-volt battery and negative grounding. Before installing this unit to a recreational vehicle, a bus, or a truck, make sure the battery voltage is appropriate for this unit to be used, otherwise, install a transformer by professional to convert the output voltage to 12V
- To avoid short circuit in the electrical system, ensure the negative battery cable is disconnected before installation.
- To prevent short circuit in the wiring and damaging to this unit, secure all wirings with cable clamp or adhesive tape. Route the wirings in a secured, out of heat place without touching any moving parts such as gear shift, handbrake, and seat rails to prevent the wiring insulation being melt/wear off.
- Never pass the yellow power cord through the installation hole into the engine compartment and connect to the car battery. Otherwise, a high possibility of serious short circuit to the electrical system may be occurred.
- Replacing a new fuse with 10A rating when the old one is broken, using no fuse or fuse with improper rating may cause damage to this unit or even fire. If a proper fuse is installed and electrical problems still occur, please consult any professional car shop for inquiry.
- Don't connect other equipments to the car battery to avoid battery overheating
- Please make sure all the wiring connections & the cables of the Speakers are well-insulated. Otherwise, this unit may be damaged by short circuiting.
- If there is no ACC available , Please connect ACC lead to the power supply with a switch
- If an external power amplifier is connected, please don't connect P.CONT lead to the power lead of the external power amplifier , otherwise, electric spark or other damage may be resulted.
- Never ground the speaker output to prevent the damage to the built-in power amplifier
- The minimum rating of the speakers connected to this unit is 50W with 4 to 8Ω impedance

ELECTRICAL CONNECTIONS

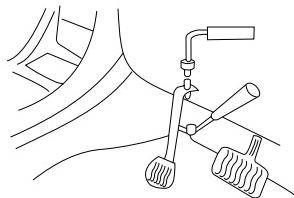
1. Parking Brake Cable Connections



Note : For Safety purpose, professional installation for the following connections is recommended.

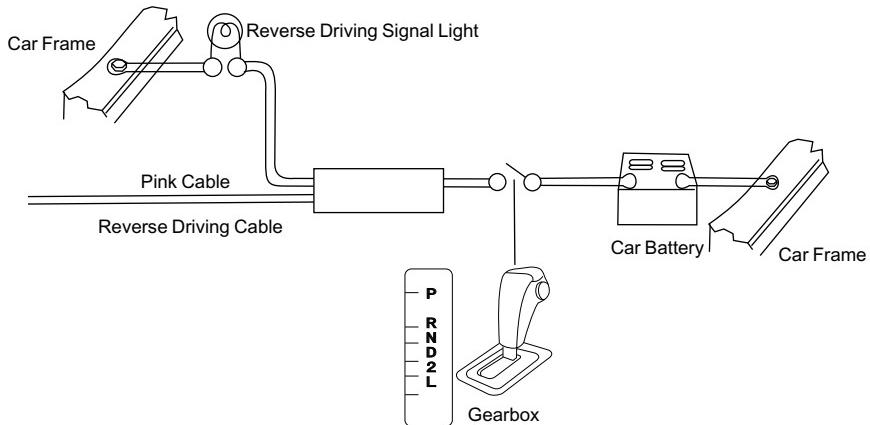


Parking Brake Switch



Parking Brake Switch

2. Reverse Drive Camera Display Cable Connections



3. Electrical Connections Overall Diagram

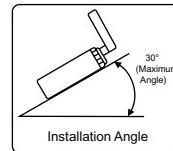
1. Standard Accessories

NO.	Item	Diagram	Quantity	NO.	Item	Diagram	Quantity
1	Short Mounting Bracket		2	6	Screw M4.0X3.0		4
2	Screw Jacket		1	7	Trim Ring		1
3	Screw M5.0		2	8	Remote Control For Front Zone		1
4	Screw M5.0X5.0		4	9	Remote Control For Rear Zone		1
5	Bolt M5.0X24.0		1	10	16 PIN Harness Cable		1

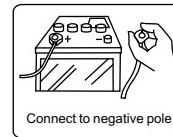
2. Note

- 1) Before installation, please make sure proper connections are conducted and the unit operates normally. Please refer to "Electrical Connections Overall Diagram", improper connection may result in damage to the unit.
- 2) Use only accessories design & manufacture for this unit, other unauthorized accessories may damage this unit.
- 3) Before installation, please fasten all the power cables.
- 4) Never install the unit close to hot area to prevent damage to electrical components such as the laser head

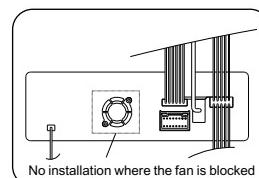
- 5) Install the unit horizontally. Install the unit more than 30 degree vertically may result worse performance.



- 6) Connect the unit to the battery negative pole to prevent electric spark.



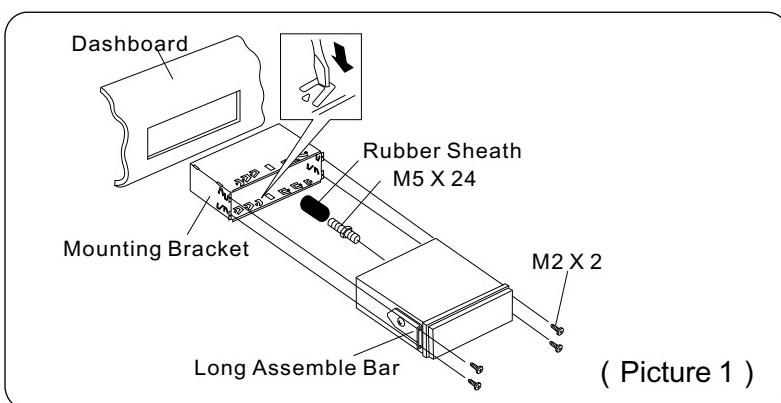
- 7) Do not block the cooling fan exit to ensure sufficient heat dissipation of this unit, failure to do this may result in damage to this unit.



3. Installation Procedure

1) Main Unit

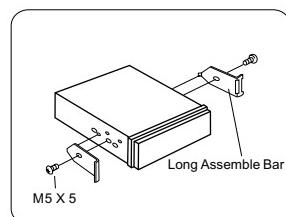
Method A: Mounting Bracket



① Insert mounting bracket into dash board, choose appropriate mounting tab according to the gap width,bending the mounting tab outwards with a screwdriver to fix the mounting bracket in place.

② .use 2 pieces of M5×5 cone shaped screw to fix two assemble bars on both sides of the unit(see picture 2)

③ .screw in 1 piece of M5×24 to the hole of the unit back and put on a rubber sheath over the screw.(see picture 1)

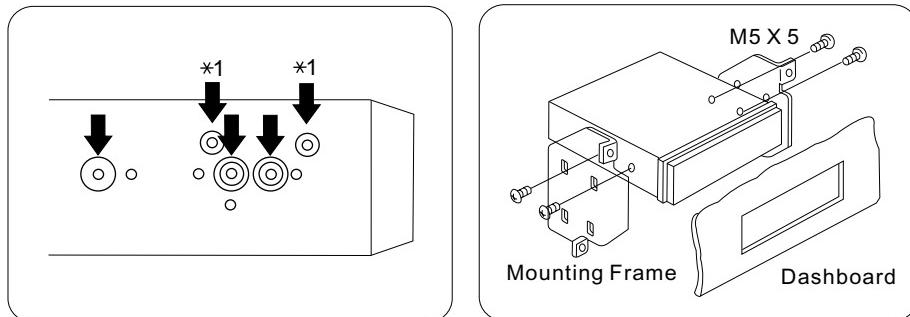


(Picture 2)

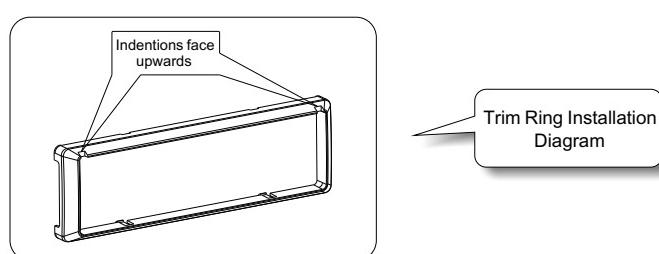
④.insert the unit into the bracket,fasten the M4×6 screw to the fireproofing board available at the back of the dashboard, and use 4 pieces of M2×2 screw to lock the assemble bars and the mounting bracket in position.

Note: According to the depth of the opening, use different length of assemble bar accordingly.
If the opening is too shallow,the monitor may be extended out 10mm from the dashboard.

Method B :



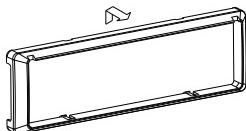
- ①. Insert this unit directly to the opening of the dashboard
 - ②. Place M4 × 3, M5 × 5 cylindrical screw or M5 × 5 cone shaped screw through the holes of the mounting frame located inside the opening to holes of the unit and fasten the screws to left & right
- 2) Trim Ring
Attach the trim ring around the front panel with two indentations on one side facing upwards



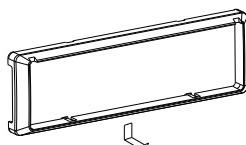
4 . Uninstallation Procedure

1) Trim Ring

- ① Push the trim ring upward and pull out the upper part.



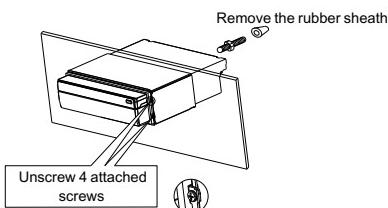
- ② Push the trim ring downward and pull out the lower part.



2) Main Unit

- ① Uninstall the trim ring.

- ② Unscrew the 4 pieces M2×2 screws.



- ③ Use a screwdriver to bend straight the bended mounting tab and tip out the unit from the mounting bracket.

- ④ Pull out the unit from the mounting bracket with both hands.

General

Operation Voltage: DC 12V
 Operation Voltage Range: 10.8 ~ 16.0V DC
 Maximum Operation Current: 10A
 Grounding System:

Car Battery Negative Pole

Installation Dimension (W×H×D) :
 178 mm×50mm×(165+25)mm

Installation Angle:
 Vertically 0° ~ +30°
 Horizontally ±15°

Net Weight: 2.3 kg

FM

Signal Noise Ratio: 55dB
 Residual Noise Sensitivity(S/N 30dB): 20dB
 Frequency Response(±3dB):
 40Hz ~ 12.5KHz
 Station Seeking Level : 20~30 dBuV
 Distortion: 1.5%
 Stereo Separation(1 KHz): 20 dB
 Antenna Impedance: 75Ω

AM

Residual Noise Sensitivity(S/N 20dB): 40dB
 Amplitude(±9KHz): 18dB

DVD Player

Signal / Noise Ratio: 90 dB
 Dynamic Range: 90 dB
 Distortion(line out): 0.1%
 Frequency Range(±3dB): 20Hz ~ 20KHz
 Maximum Output Power: 45W×4
 Loaded Impedance: 4Ω

AUX IN

Distortion: 0.5%
 Frequency Response(±3dB): 20Hz ~ 20KHz
 Audio Input Level: 1.0 Vrms

Audio

Audio Output Impedance: 100Ω
 Audio Output Level: ≥2.5Vrms
 (under normal audio input level at maximum output volume)

Video

Normal Video Input Level:
 1.0±0.2V(CVBS),700mV(RGB)
 Video Input Impedance: 75Ω
 Video Output Impedance: 75Ω
 Video Output Level: 1.0±0.2V
 (under normal video input level)

TFT Monitor

Screen Diagonal: 7 inch
 Usable Display Area: 154.08 (W) × 86.58 (H)
 Resolution: 1440 (W) × 234 (H)
 Brightness: 350cd/m
 (measure the center brightness after 30 minutes)
 Contrast: 350 (TYP.)
 Response Time: Rise = 11ms, Decline = 22ms
 Viewing Angle:
 From Top = 30°
 From bottom = 60°
 Horizontally = +60°
 LCD Life Cycle: 8000 hours(at 25°C)

Environment

Operating Temperature: - 20°C ~ + 70°C
 Storing Temperature: - 30°C ~ + 80°C
 Operating Humidity: 45% ~ 80%RH
 Storing Humidity: 30% ~ 90%RH